MAY 13

COMMERCIAL CAR JOURNAL

and OPERATION & MAINTENANCE

MAY 1929

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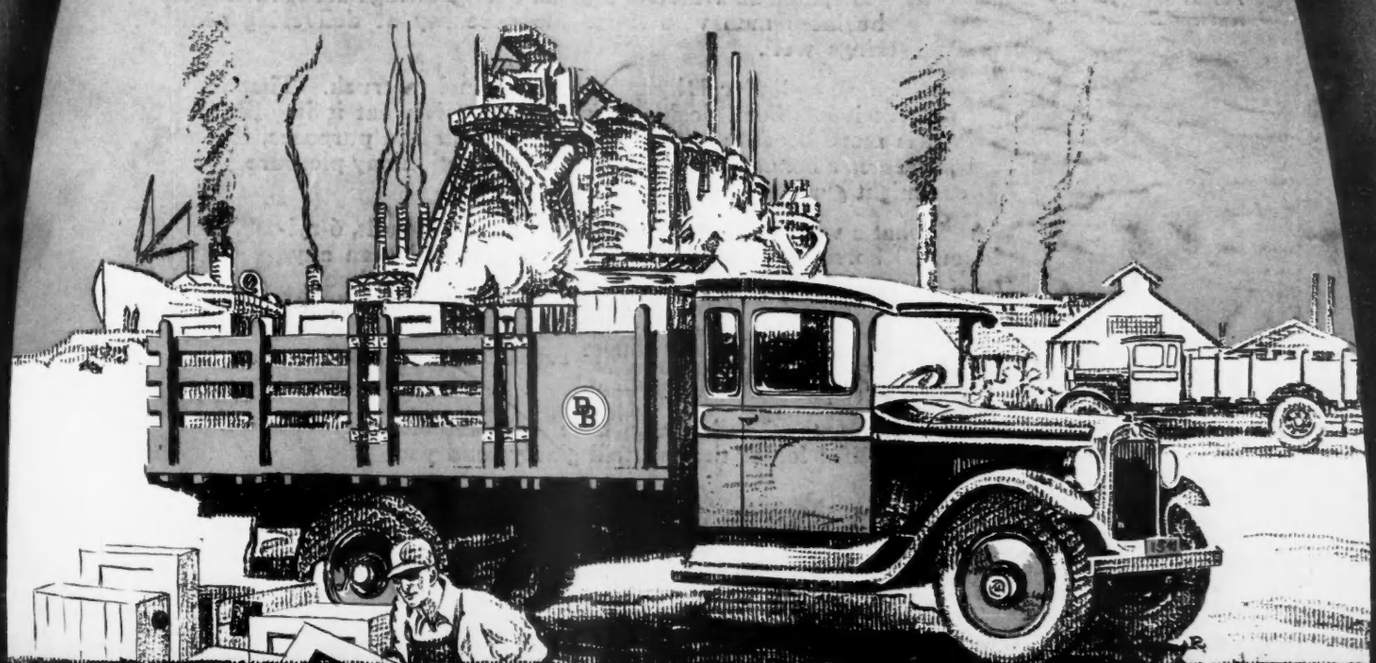
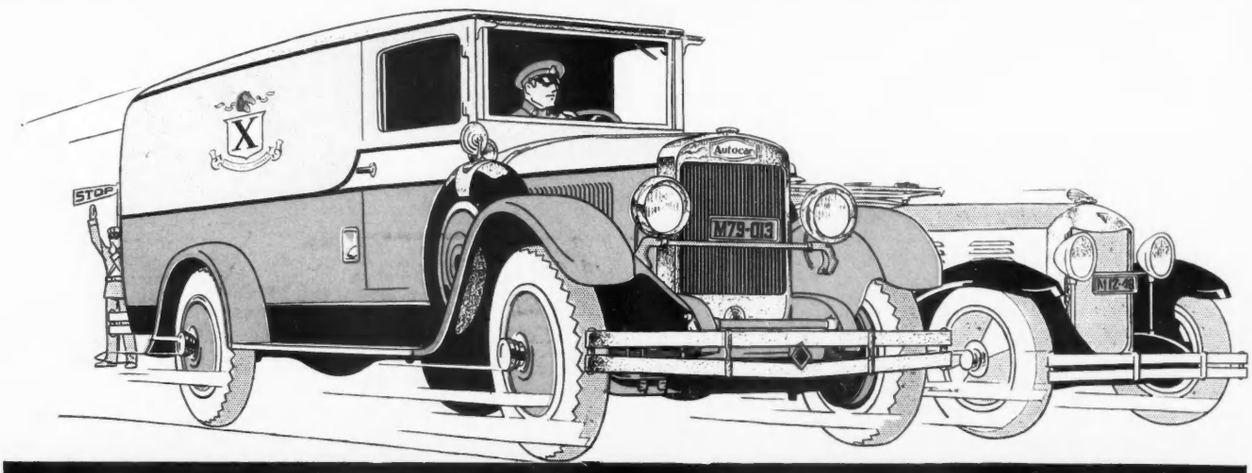
There is no guess, no experiment about Dodge Trucks. ¶ For years they have been paying their hundreds of thousands of owners a high return on a small investment—in work done, in time saved and in dollars actually earned. ¶ They are powerful, fast, economical, comfortable, safe, good-looking.



DODGE BROTHERS TRUCKS

BUSES AND MOTOR COACHES

SOLD BY DODGE BROTHERS DEALERS EVERYWHERE



Utility --- plus Beauty

Certainly not today—and it is highly doubtful that very soon tomorrow, will such a truck as the new six-cylinder Autocar Dispatch be available for that ever-growing host of intelligent business men who know the necessity of delivering good things well.

The six-cylinder Dispatch is every inch a truck. That is what it has been designed for and that is what it is. But it is more because, together with its utilitarian purposes, it possesses a beauty and style in whose reflection any pleasure car might glory.

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This latest addition to the Autocar Line is completely described in a beautiful folder that we will gladly send you, on request.

The Autocar Dealer Plan

Exclusive territory!

A floor plan that assures an exceptionally small investment and a rapid turnover!

Factory co-operation and definite sales helps that assure the profitable conduct of your business from the start!

A national and local advertising campaign!

A complete line of trucks that is unsurpassed in quality and performance!

Let us send you the Autocar Dealer Plan.

AUTOCAR TRUCKS

The Autocar Company

Ardmore Pa. Est. 1897

PRECISION BUILT

COMMERCIAL CAR JOURNAL
and OPERATION & MAINTENANCE

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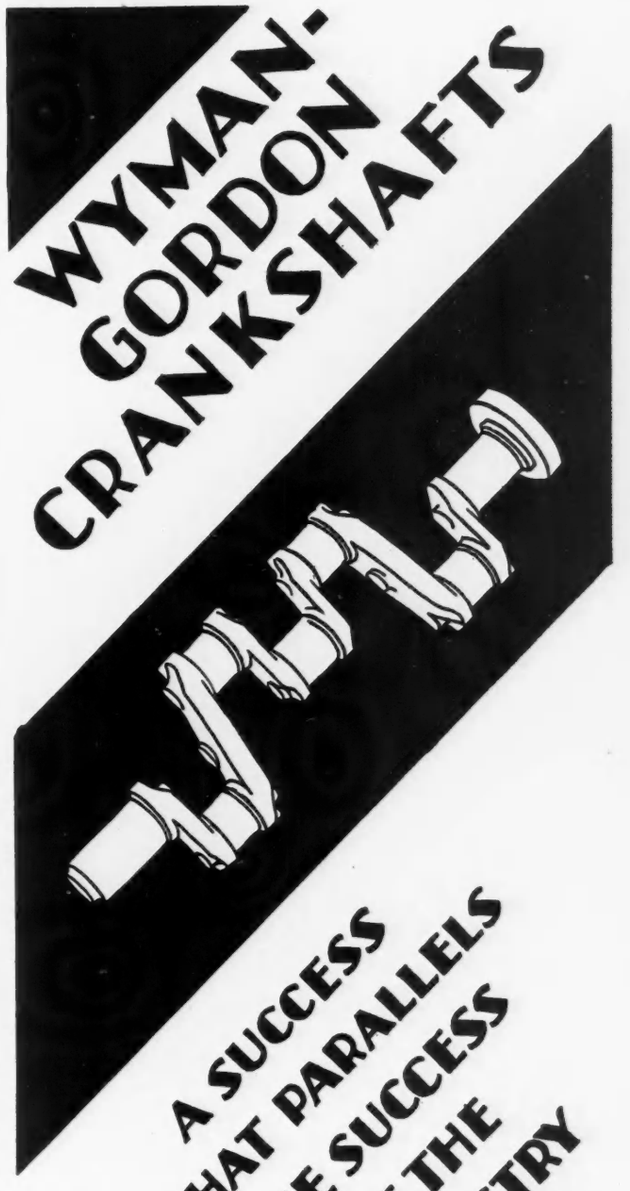
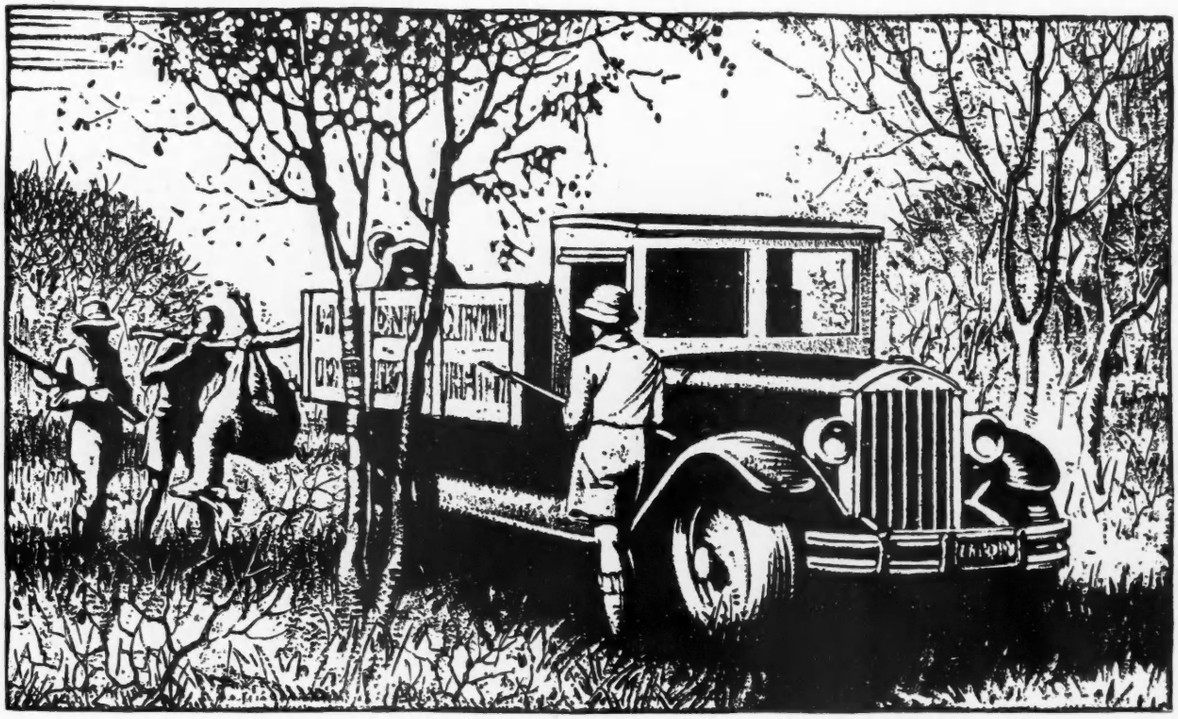


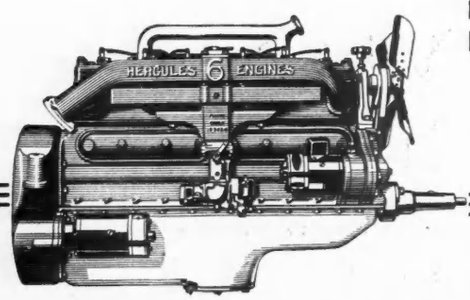
Across the African Veldt Under Hercules Power



From Cape Town up through the heart of Africa, two Diamond T trucks, equipped with Hercules Motors, carried the Cameron-Cadle Expedition on its exploration of the dark continent.

Penetrating the African wilderness—reaching many places where a motor truck had never been seen before—these Diamond T's came out with colors flying. Hercules Power, ever ample and reliable, together with Hercules Stamina, inherent and unfailing, squarely met the terrific test—and triumphed!

Many other truck manufacturers have tested Hercules Power just as severely—and as a result have adopted Hercules Engines as standard equipment.



HERCULES MOTORS CORPORATION
CANTON, OHIO, U. S. A.
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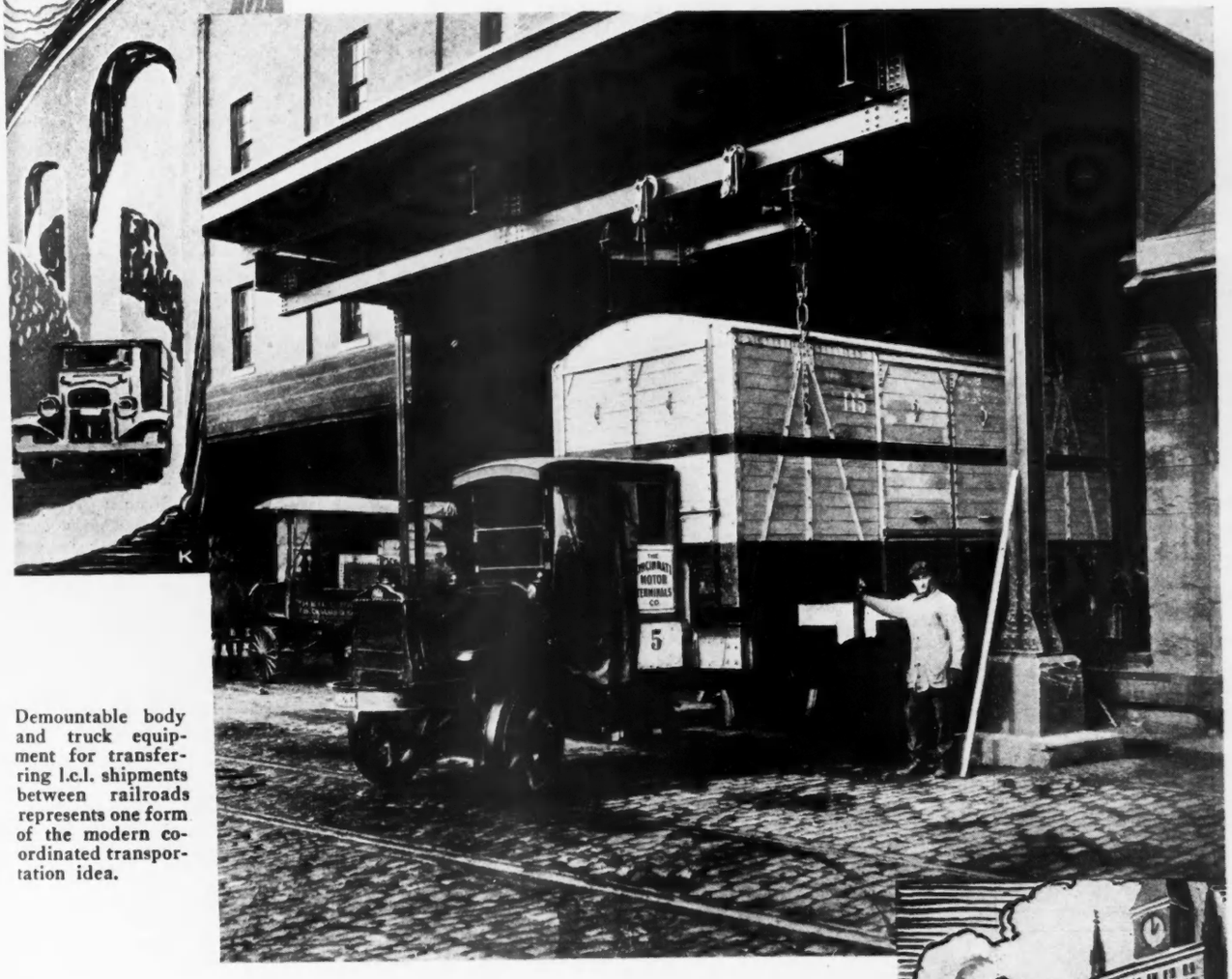
HERCULES ENGINES

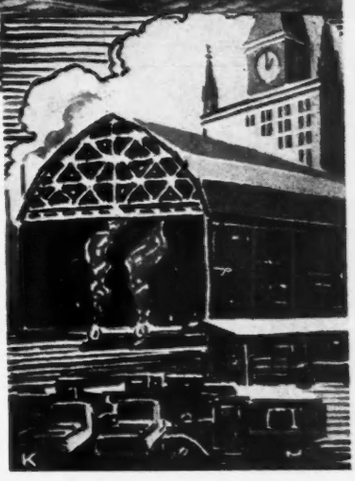
COMMERCIAL CAR JOURNAL
and OPERATION & MAINTENANCE

VOL. XXXVII NUMBER 3

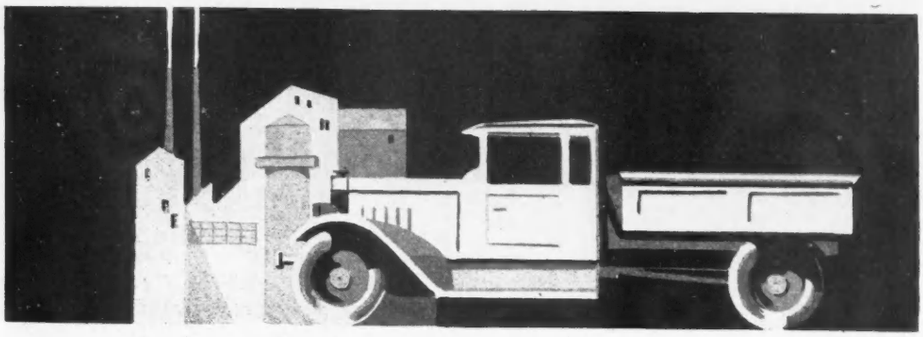
PHILADELPHIA, MAY, 1929



Demountable body and truck equipment for transferring l.c.l. shipments between railroads represents one form of the modern coordinated transportation idea.



THE great progress of our country financially, industrially and socially is largely founded on efficient and economical transportation. Railroads have long furnished the nation's long-haul and large volume needs, and now that the truck has demonstrated its utility in the short-haul field, where traffic is either light or variable, progressive railroads are efficiently meeting every hauling requirement by fitting the truck into a system of coordinated transportation. In this issue A. J. Brosseau tells how railroads by adopting the truck are effecting marked economies in operation, accelerating service and giving greater satisfaction to the public.



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Otto Bauman

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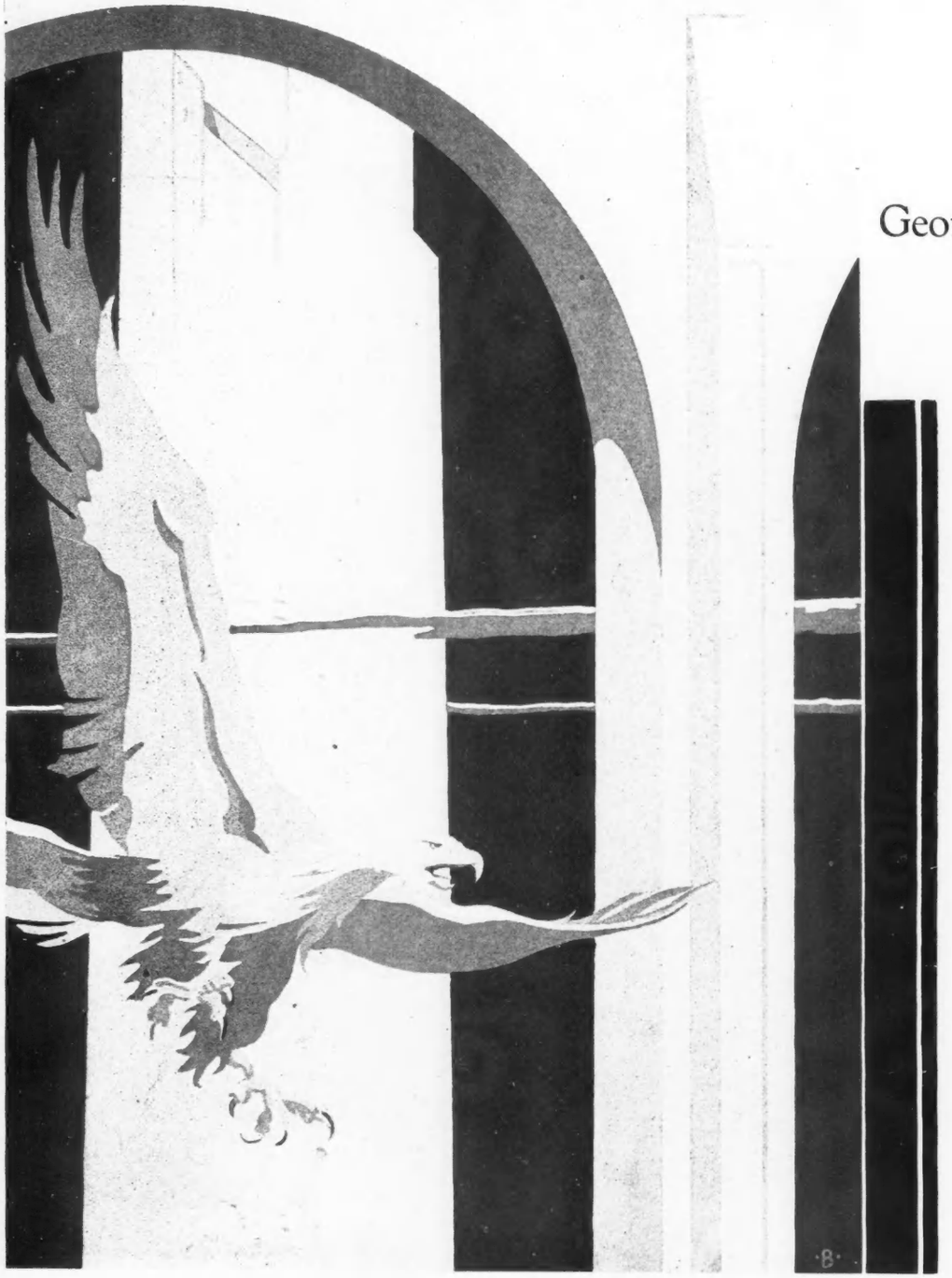
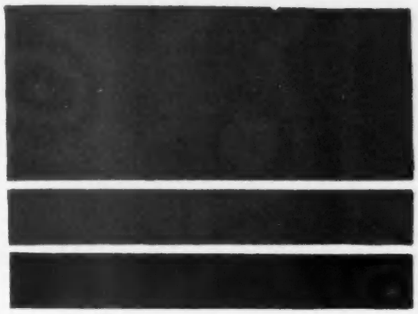


By
George T. Hook

AFTER a full year of remarkable achievement, the truck industry continued its record-shattering pace in the first quarter of the present year with unprecedented sales, production and export accomplishments. And although the records are unparalleled in truck history, such a spirit of optimism prevails throughout the industry—among manufacturers and the trade—that it is reasonably safe to predict the second quarter will be even better than the first.

Past performance amply supports any optimism of the future one might indulge in. Experience of the last three years shows that sales and production of the second quarter have been greater than the first quarter. In this case precedent is not too weak a reed on which to lean one's rosy outlook because it



TO NEW HEIGHT

Truck Sales, Export and Production Totals Make First Quarter Greatest in Truck History. Second Quarter Outlook Unusually Promising

remains an undeniable fact that the spring and summer months are the harvest months of the truck industry. With not even a faint cloud of depression visible on the business horizon, the truck trade may be expected to redouble its sales efforts in the second quarter and make history repeat itself.

Production in the initial three months of the year leaped to the stupendous total of approximately 197,496 trucks, a gain of 86 per cent over the same period of 1928. This includes the United States and Canada. Of this amount, the United States share was 179,668, a gain of 79 per cent over 1928. Domestic sales kept pace with this production increase by going to 102,307, or 74 per cent better than in the first quarter of last year.

United States and Canadian exports in the first period of 1929 bettered the corresponding quarter of 1928 by 108 per cent. Total exports were 75,400, of which United States accounted for about 67,400. Adding this figure to domestic sales and subtracting from United States production the result shows an appreciation of dealer inventories for the first quarter of 9961.

The frog that hopped into the center of the truck pond and extended record ripples to well-nigh fantastic limits, is none other than the Ford company.

Back in 1928 Ford found time to build about 8700 commercial vehicles. Now that its period of Model A preparation has been completed, the company has swung into a stride that by August should enable it to reach the heights it occupied when the Model T was a real force and not, so to speak, a moving picture. Ford output in the first quarter of this year was approximately 50,200. This was 25.4 per cent of total truck production as compared with the 29.9 per cent enjoyed in the corresponding quarter of 1926 when T models held public favor. Ford truck sales for the same period were 41.9 per cent of total truck sales in 1929 and 55.9 per cent of total in 1926.

In the second quarter of 1929 Ford will unquestionably play the same leading role as in the initial quarter. Dealers are behind in their deliveries and begging for trucks. If their demands are satisfactorily met, Ford retail sales in the next three months should be at least 25 per cent better than in the first three.

The most satisfying thing about the entire truck situation is that whereas Ford is coming back he is coming back into his own, and is not making inroads on the markets of the other makers. Statistics prove the point. Last year when Ford fell to 4400 from 40,000 truck sales in 1927, the rest of the truck industry recorded a gain of 13 per cent, from 47,000 to 54,000. (All these figures are approximate; accompanying tables contain more exact ones.) In the first quarter of 1929, although Ford went from 4400 to 43,000, the other makers registered an 11 per cent increase, from 54,000 to 60,000. These figures lead to the obvious conclusion that Ford's loss was not the others' gain to the extent one might offhand expect in such a circumstance.

Therefore, it would be quite logical to suppose that the other truck makers

First Quarter Truck Production (U. S. and Canada)

	1929	1928	% Increase
Jan.	55,921	27,840	101
Feb.	64,228	34,834	84
Mar.	77,347	43,735	77
1st Quarter	197,496	106,409	86

First Quarter U. S. Truck Sales

	1929	1928	% Increase
Jan.	29,857	16,423	82
Feb.	32,450	17,513	85
Mar.	40,000	24,757	62
1st Quarter	102,307	58,693	74

First Quarter Truck Exports (U. S. and Canada)

	1929	1928	% Increase
Jan.	19,900	13,800	44
Feb.	26,500	11,000	141
Mar.	29,000	11,500	152
1st Quarter	75,400	36,300	108

First Quarter Truck Dealer Inventory Increase

U. S. 1929 First Quarter Truck Production ..		179,668
U. S. 1929 First Quarter Domestic Sales	102,307	
U. S. 1929 First Quarter Exports, Including Foreign Assemblies.	67,400	169,707
U. S. Dealer Stock Appreciation in 1929 First Quarter.....		9,961

have expanded their markets healthily without dependence on any temporary inheritance from the Ford slump, and have maintained and enlarged these markets in the face of Ford's return to pristine vigor. A more salubrious condition would be difficult to imagine.

This sales accomplishment is due not only to the excellent sales promotion of manufacturers but the intensive selling efforts of truck dealers. The trade entered upon the current year with a feeling that business would exceed that of 1928, and has earnestly set about to realize its anticipations.

The export market has been a source of great profit and no end of satisfaction to other-than-Ford truck manufacturers. It was so last year and is expected to be even more so this year, and the first quarter realized this expectation auspiciously.

Ford's truck production for the first quarter of this year topped domestic sales by some 7000 units. Even if all these 7000 vehicles took to the sea and found their way to foreign climes, it would still be very evident that Ford has not yet begun to give the export market the attention—to say nothing of cultivation—it invites and deserves. It is in this field of exports that the other truck makers have been making most impressive advances. Last year, while the Ford organization was beating its breast and tearing its hair (perhaps a mild description of the actual condition) the rest of the industry was largely responsible for a 50 per cent truck export increase over 1927, when Ford occupied the foreground of the truck picture. In 1929's first three months the entire industry's increase over the corresponding portion of 1928 was 108 per cent, in which other-than-Ford manufacturers played by far the most conspicuous part—to the extent of at least 80 per cent.

Judging by first quarter accomplishments, the positive convictions of factory executives with regard to the rest of the year, and Ford's renascence, there is every reason to predict—even as early as April—that unless a king or a duke or something is knocked off with internationally cataclysmic results, the truck industry will turn the corner to 1930 with at least a 50 per cent export increase over record 1928 to its credit.

Among the factors supporting an optimistic opinion of the truck industry's immediate future are general prosperity shared alike by industrial and agricultural districts; stabilization of markets abroad, opening larger export possibilities; significant departures from former accepted design, and the growing demand for fleets of trucks on the part of corporations and individual operators who realize the economy and dependability of motorized units for delivery and distribution.

The results of the first three months are a significant corroboration of the views expressed to the writer by leading truck factory executives with regard to the outlook for 1929. Truck executives have ever been conservatively inclined, especially in their predictions, so that when they expressed an almost unanimous opinion that in 1929 the truck industry would kick all previous records off the shelf—and kick them high, wide and handsome—it was to be assumed that they had no business corns — and expected none — to hamper their efforts.

Truck factories will have no difficulty maintaining the pace established in the initial quarter. To increase their output in the second quarter, they will be dependent upon parts makers who, to judge from reports, are having such demands made of them that they are behind in deliveries. This is but another vane that shows the truck industry winds are blowing very favorably.

The trade likewise entered upon the present year with high expectations of doing even better than last year. Truck dealers responding in a survey covering key sections of the country, declared they were preparing for a big business year in 1929. The fact that domestic sales in the first quarter of this year exceeded the corresponding period last year by 74 per cent is a positive indication that sales and merchandising effort has been greatly intensified.

Reports from the field also give evidence that used-truck trading is being done on a much sounder basis than ever before. And with allowances watched carefully, the trade indubitably turned a satisfactory profit penny in the first quarter.

During the last 60 days many truck companies announced new models. These, incorporating the latest features in mechanical and body design, can be depended upon to stimulate an interest on the part of both dealers and prospects that should make the second quarter one of the most voluminous and profitable in recent truck history.

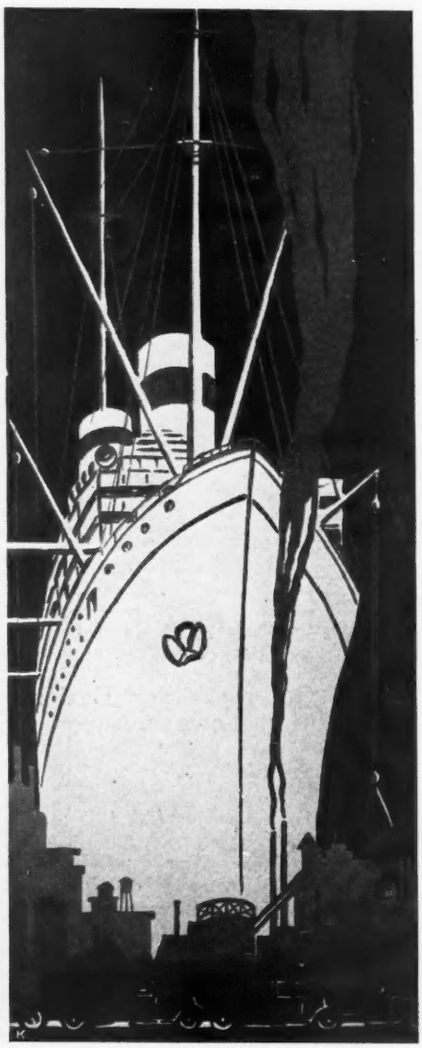
Beginning with June—and not later than July—a paring of production schedules may be expected in the second half of the year, but it will not be drastic. In fact, if one were inclined to predict a 700,000 production year, this writer would not endeavor to disillusion him.

Comparative Ford U. S. Truck Sales Analysis

First Quarter	Ford	All Makes	Ford % Total
1929	42,859	102,307	41.9
1928	4,416	58,693	7.5
1927	40,207	87,535	45.9
1926	47,852	85,580	55.9

Comparative Ford Truck Production Analysis

First Quarter	Ford	All Makes	Ford % Total
1929	50,200	197,496	25.4
1928	8,700	106,409	8.2
1927	52,580	139,291	37.7
1926	49,470	124,107	39.9



THREE UTILITIES USE ONE FLEET

FORM AUTO 25 20M-7-27 W

EQUITABLE AUTO COMPANY

Driver's Incoming Inspection Report

Date ..... 192....

Truck No. .....

Mark X to the following questions where conditions are found O. K., otherwise mention number of question and give full details under remarks.

1	Does truck lack power?	
2	Are brakes working properly?	
3	Does clutch (controller) operate smoothly?	
4	Are lights working properly?	
5	Is engine clean? (Is motor and commutator O. K.)	
6	Does truck rattle?	
7	Does truck squeak?	
8	Are tires badly worn?	
9	Does truck leak anywhere?	
10	Is truck equipped with properly filled fire extinguisher?	
11	Is truck equipped with jack and tool-kit?	
12	Is the odometer (or speedometer) working?	
13	What is your mileage?	

Remarks .....

Driver's Signature

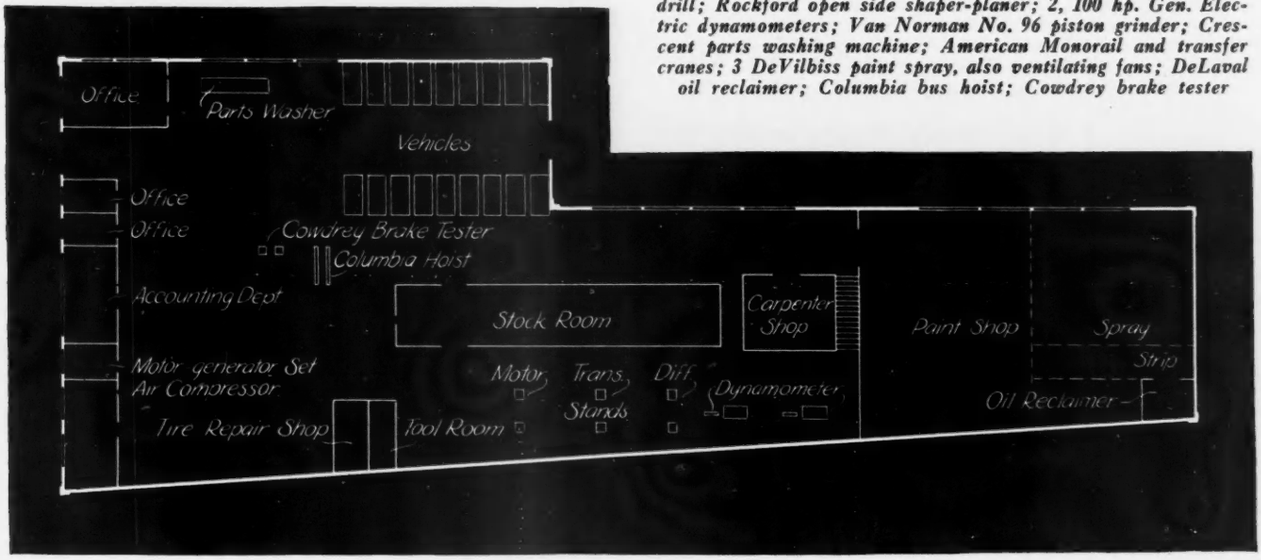
Questions on report are so worded that drivers cannot make a perfunctory report of a vehicle's condition

THREE public utility companies which supply gas, electric light and power, and street railway service to Pittsburgh, Pa., are affiliated with one company. Because of this corporate setup it was possible to combine the fleets into a single organization and to take advantage of the economies resulting from this pooling of transportation. The combined fleet comprises 560 vehicles of which 370 are trucks and the balance passenger cars. The fleet furnishes motor vehicles to the gas, power and railway companies and does certain major overhauling of chassis units for the bus company.

An unusual feature of the fleet organization is that it has been incorporated as a separate, though affiliated, company. It owns the motor vehicles and charges each operating company, for vehicles furnished, at rates established by agreement, which are limited by competitive figures of outside haulers and car and truck rental agencies.

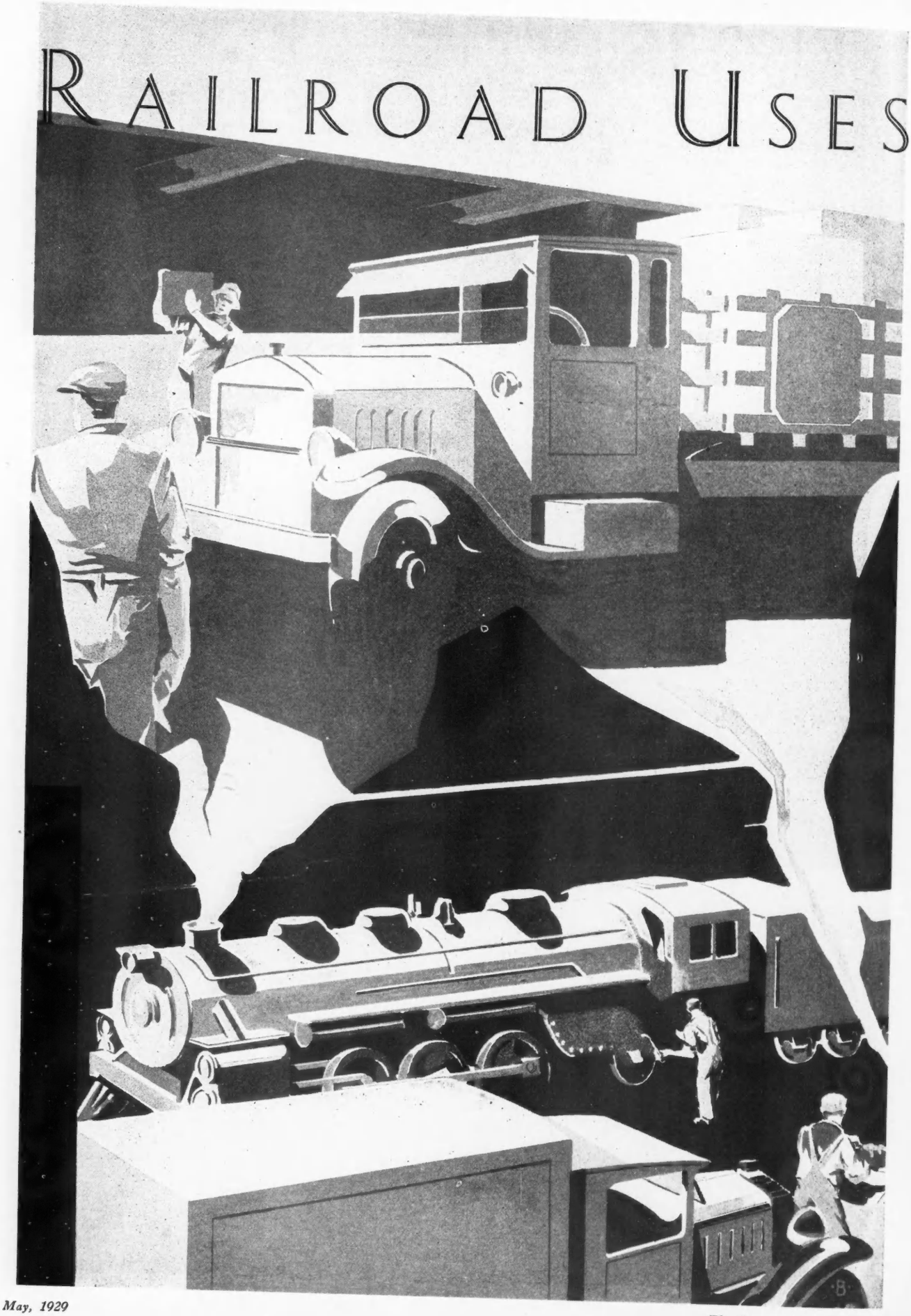
Rates charged to the using compa-

(Turn to page 44, please)



Floor plan of base repair shop of the Equitable Auto Co. Equipment comprises the following: Van Norman piston pin reaming machine; Manley hydraulic press; 4, Heintz electric tire vulcanizing molds; 6 tube Heintz vulcanizing mold; Elmco electric test bench; Hullharst mica undercutter; Roth constant potential 400 amp. charging equipment; Dalton combination tool drill-miller-lathe; Norton 72 in. crankshaft grinder; Heald Internal grinder; Sebastian gap lathe; Lathe; American Radial drill; Rockford open side shaper-planer; 2, 100 hp. Gen. Electric dynamometers; Van Norman No. 96 piston grinder; Crescent parts washing machine; American Monorail and transfer cranes; 3 DeVilbiss paint spray, also ventilating fans; DeLaval oil reclaimer; Columbia bus hoist; Cowdrey brake tester

RAILROAD USES



OF MOTOR TRUCKS

Line Haul and Terminal Work Offer Opportunities for Efficiently Coordinating Rail and Truck Freight Transportation

By A. J. Brosseau

Vice-President of the Commercial Car Division, National Automobile Chamber of Commerce

NATIONAL progress is founded on efficient and economical transportation. Experience everywhere has demonstrated that "Easy progress of men and things from place to place makes a nation great and strong."

On long hauls, where a large volume of traffic is moving, railroads have given rapid and economical service in fulfilling man's natural desire for mobility, his constant urge to go somewhere else.

In the short-haul field, and particularly where traffic is either light or variable, the motor vehicle has demonstrated its utility by rendering quick and efficient service at low cost.

In the United States strenuous opposition arose at first from the established railway lines against the extension of motor bus and truck transportation, particularly as common carriers. Similar antagonism has ever arisen between a newly established and an old form of transportation.

Surveys were undertaken several years ago by the United States Bureau of Public Roads. More recently, the Interstate Commerce Commission held 13 hearings with a view to determining the place of the motor vehicle in the general transportation scheme. All of these surveys were inaugurated to determine the proper place of each form so that effective coordination might make the best service available to the public, both from the standpoint of reduced costs and of time saving.

As a result of these studies, it was agreed that motor vehicles are allies and not competitors of other forms of transportation, and that while they may take away traffic in one place, they develop new traffic in many other directions. It is not surprising, therefore, that to give maximum service, progressive railroads are now adapting motor vehicles to their needs.

Motor Trucks are now used in railroads in the United States:

A. In line haul.

1. To replace abandoned branch rail lines or to extend rail service into sparsely settled districts.
2. As substitutes for local less-than-carload, or "peddler" way-freight trains.

B. In terminal work.

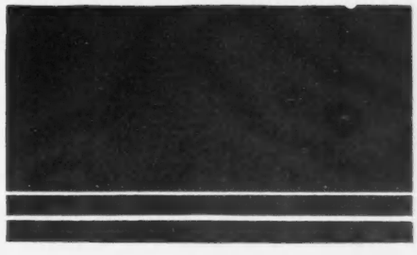
3. In developing container-car systems.
4. For assembling and distributing less-than-carload lots, or L.C.L. shipments from and to off-track freight stations located in central points of a city which are not served by rail lines.
5. To replace transfer cars used in terminal interchange of L.C.L. freight between different rail lines.
6. For store-door delivery.

No. 1—Branch railway lines were in many instances in the past built into districts where, under present-day operating conditions, they are becoming exceedingly unprofitable. Modern railroad operators have abandoned these lines as being a source of continued and mounting losses. They must continue to serve the public dependent on these lines for transportation, however, and this they have done by substituting fleets of motor trucks operating on the highways. This course has not only reduced their direct operating losses, but in many cases has turned them into profits.

In the same manner, they have hesitated to build expensive branches into new and sparsely settled territories. They have instead developed freight service in such districts by means of motor trucks, until such time as rail construction may be warranted.

No. 2—Under present-day traffic conditions, one of the great problems confronting the railroad man is that of the local less-than-carload, or peddler freight train, which stops at every station to load or discharge a few small shipments. These trains are not only generally run at a loss but in addition they tie up main line trackage for a good part of the day and thereby impede the profitable long haul service.

Formerly L.C.L. shipments originating in a city for delivery to suburban points were handled eight times: (1) into the shipper's dray for the haul to his freight station; (2) unloading on the freight station platform; (3) handling from the platform into a freight car, (4) which was hauled to a transfer station and unloaded on the platform there, (5) whence it was loaded into a way freight car, (6) from which it was unloaded at destination, (7) then loaded into the consignee's dray, (8) and finally unloaded at the consignee's door.



If all L.C.L. freight delivered at suburban points originated in the nearby city, motor trucks could be used exclusively, requiring only two handlings: loading at the shipper's door and discharging at the consignee's door. As much L.C.L. freight originates at distant points, however, motor trucks cannot wholly replace railway service, but they can be used as an important adjunct to it.

In the coordinated system, L.C.L. freight is loaded into "destination cars" which are "spotted," or side-tracked, at certain major stations along the line, usually every fourth or fifth. At these points the cars are unloaded and here the motor truck plays its role. For example, the car may be unloaded at Station A. Here motor trucks pick up and deliver to the intermediate Stations B, C, D and E such shipments as may be destined for these points. Arriving at Station F empty, another car has been spotted there and the previous operation is repeated for Stations G, H, I and J. The truck continues on in this manner picking up shipments which have been unloaded from cars at major stations and delivering them to intermediate stations to which they are addressed, until it reaches the end of the division.

In returning over the division, the operation is reversed. Outbound shipments are picked up at the various intermediate stations by the trucks and are delivered to empty cars spotted at the major stations along the line.

The benefits accruing from the use of this system of handling local L.C.L. freight are many. Elimination of local way-freight trains in this manner not only lowers cost of operation, but in addition it removes interference with other main line rail movement, reduces the number of handlings with a consequent saving in loss and damage, and affords a more prompt and satisfactory movement for such shipments.

No. 3—Motor trucks are also important factors in developing container car systems. Shipping in containers has proven very satisfactory in cases where merchandise is of high value and where a return traffic can be built up, obviating the necessity of bringing back empty containers.

In this system merchandise is packed into the containers at the shipper's plant or warehouse, after which they are sealed and locked. The containers are then hauled by motor truck to the freight yard, two containers to each truck, where electric traveling cranes have been installed to load them onto the cars. (This service will be described in detail in the June issue of COMMERCIAL CAR JOURNAL AND OPERATION & MAINTENANCE.) On arrival at destination, the containers are hoisted onto motor trucks for delivery to the consignee's receiving room. Here the seals are broken and the merchandise is unpacked.

No. 4—In many cities it is found that while the great bulk of L.C.L. shipments originate in or are addressed to the heart of the city, most of the on-track freight stations are some distance outside the city. This would entail a vast amount of expensive trucking on the part of shippers and receivers of freight if facilities were not supplied to care for the situation.

Universal off-track freight stations operated by the Independent Terminal Co. serve 22 railroads and the Federal Barge Line entering St. Louis. These stations, both inbound and outbound, are located at strategic points in the center of the city while the on-track freight stations are located for the most part across the river in East St. Louis, a distance of several miles.

Shippers' vehicles deliver at platforms on the inside of these off-track depots, whence the shipments are trucked to semi-trailers placed on the other side of the platform to receive merchandise destined for on-track stations of different railroads across the river.

Fifty-two tractor-type trucks haul these semi-trailers, there being three trailers for each tractor, allowing for one loading, one in transit and one discharging. They are equipped with special devices which permit of automatic coupling and uncoupling from the driver's seat, thereby eliminating any loss of time in the operation.

When loaded, the trailers are hauled to outbound on-track stations where they are unloaded while attached to the tractor so that a proper receipt may be secured. When empty the trailers are left at inbound on-track freight stations to be loaded with shipments arriving there for the city or for transfer to other railroads leaving the city in another direction. The same procedure is followed at these inbound on-track stations except that the merchandise is delivered to consignee's vehicles at inbound off-track stations or to outbound on-track stations of the other rail lines.

In cases where trailers carry full loads of one shipment instead of several shipments, transfer is often made direct from shipper's to consignee's vehicles.

Dispatchers in constant touch with all tractor and trailer movements direct the transfer of 7,000,000 lb. of freight each working day, representing 466 carloads.

No. 5—The system previously referred to is also used to effect interchange of L.C.L. shipments between the several carriers entering the city. In Cincinnati motor trucks equipped with demountable bodies are used for terminal interchange of L.C.L. freight to speed up transfers between 35 stations of the six railroads serving that city.

Equipment required in this operation consists of 19 motor trucks, 225 demountable bodies, 66 electric and 13 hand hoists. This equipment has replaced 225 box cars and 115 heavy horse drays and has eliminated 300,000 switching operations formerly required annually for terminal interchange of L.C.L. freight at this point.

In addition, substitution of motor trucks has cut interchange time from 62 hours to normal daily movement, reduced the platform area required by 15 per cent and saved 35 per cent in operating costs.

A container or demountable body is provided for each movement demanded. They are placed in rows in the freight shed and shipments are trucked directly to the proper container upon arrival at the station. When fully loaded, the containers are carried by a traveling hoist to a waiting motor truck chassis.

When a container is delivered at its destination, it is unloaded and the merchandise is trucked directly to outbound freight cars.

As one container is hoisted off the motor truck chassis, another loaded one is hoisted on it destined for some other station. Routing trucks from one station to another is done by a dispatcher in constant, instant communication with all stations through a private telephone system.

A somewhat similar operation is carried on by the New York Central Railroad in New York City except that equipment used is of the tractor-truck and semi-trailer type. Formerly shipments received at about a half dozen down town stations were loaded into cars and hauled to West Albany, where they were transferred to destination cars. Now motor trucks assemble L.C.L. shipments from the various city terminals at the East Thirty-Third Street Station where they are loaded into outbound cars routed directly to distant points. In this way the number of cars used in this traffic has been reduced by about 50 per cent.

Similarly, inbound cars are unloaded at West Thirty-Third Street and the shipments are distributed to the other downtown terminals.

No. 6—The average freight car spends 10 per cent of its life on line haul and the other 90 per cent in yards, terminals or on sidings. The chief reason for this 90 per cent of non-productive time is unloading delay caused by congestion of freight at delivery platforms.

(Turn to page 60, please)

RULING PROTECTS LINE HAULERS

ANYWHERE-FOR-HIRE motor carriers should not be permitted to operate over any route traversed by a regular line carrier on the same basis of rates of the latter, according to a recent ruling by the Oregon Public Service Commission. This order was based on the fact that regular carriers have to pay a much greater tax for the use of the highways as well as perform a service that is more exacting and expensive to maintain.

To protect the regular carriers from undue competition from anywhere-for-hire operators the commission required that rates for irregular carriers should be on an hourly, mileage or zone basis and not on weight or size. Under this system of rates irregular carriers must carry full loads for successful operation. Because the handling of furniture shipments by motor carriers presents a peculiarly different problem, the commission was of the opinion that such carriers ought to be exempted from regular rate schedules and permitted to charge on a flat contract basis. (F-A-83, P.S.C. Or. Order No. 1584.)

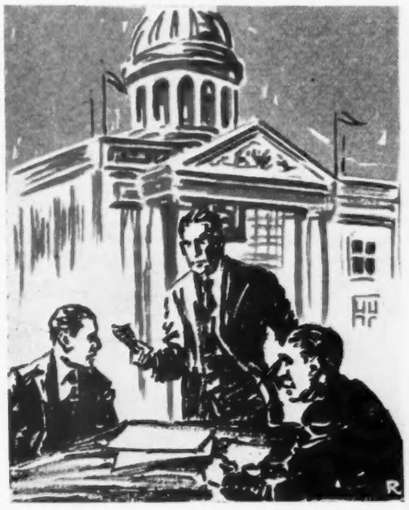
Protects Rail Service

A certificate to truck milk, cream and livestock to the Denver market was recently denied the Hill Top & Denver Truck Line by the Colorado Commission in order to insure the railroads serving the same districts a satisfactory return on their investment. Evidence revealed the fact that the railroads, unless protected, would be afforded an excuse to curtail or abandon a service that is vital to the communities involved, and that the service offered by the railroads should be encouraged by restricting trucking operations to the picking up and delivering of farm products to receiving points along the railroad. (Application No. 308—Decision No. 1620.)

Merchant and Hauler

The fact that merchandise is transported on a sub-contract basis and that a freight dock is furnished by a merchant who also transports his own merchandise does not change the merchant's status as that of a common carrier, according to a decision handed down by the Colorado Commission. The case involved a Denver fruit and vegetable merchant, who, when he discovered another truck was necessary to handle his business, decided to contract and act as a distributor in connection with his own business. In order to get full loads he solicited business. Shipments were delivered at a freight docket provided by him and all actual transportation was done by two motor carriers who had a contract with him. (Re Stodghill, Case No. 382, Decision No. 1942.)

Other Decisions by Public Service Commissions



Must Stop at Rail Crossings

Failure of a Pennsylvania vehicle operator to bring his vehicle to a full stop before crossing railroad tracks at grade cost him $150. This penalty was imposed by the Pennsylvania Commission in violation of General Order No. 24 of the commission. Upon imposing the penalty the commission said, "that it would not be lenient in respect to the jeopardy to the public which the carrier had occasioned by his violations of the order. (Scranton R. Co. v. Owens, Complaint Docket No. 6515.)

Favors Through Shipments

It is illogical and impractical to haul perishable farm products, destined for eastern markets, by truck 123 miles from Tonasket to Wenatchee, Wash., to load them on an express car when the shipment could be loaded direct in the express car at Tonasket and reach the market just as quickly. The Washington Commission rendered this opinion in denying the application of Davis & Banker for a certificate. (D-240 et al. Order No. 2310.)

Motor Carrier Cooperation

In view of the great convenience to shippers in the territory served, an arrangement between an interstate and a local carrier whereby the former turned over for local delivery shipments to points within the state of the latter was not restrained by the Pennsylvania Commission. The commission, however, upheld its authority to stop the practice should it at any time result in unfair competition. (Mushroom Transp. Co. v. Carroll & Fox—Pa.—Complaint Docket No. 7481.)

Certificates Not Divisible

The leasing of any part of an operative right is not permissible without authority from the commission. So decided the California Commission when Pickwick Stages arranged to lease that part of its right covering the transport of property other than express to another company. A certificate holder desiring to divest itself of the obligation to carry freight must make application to abandon such service. (Decision No. 19412—Application No. 14328.)

Special Facilities Required

Notwithstanding existing express facilities, the Colorado Commission recently granted the Exhibitors Film Delivery & Service Co., a concern engaged in the transportation of motion picture films between various exhibitors, a certificate of convenience and necessity. The grant was based on the highly specialized character of the film delivery service and the necessity for prompt and efficient handling. Films had to be used as frequently as possible during the first ninety days after they were offered for exhibition. The commission said that in view of the late hour at which exhibiting houses closed use of existing facilities was not convenient. (Re Exhibitors Film Service Co., No. 1009—Decision No. 1979.)

CREATES PROSPECTS TO BUILD

Omaha Salesman Functions as a Clearing-House Between Users and Drivers and Sells Trucks

By George R. Harrison

> WANTED—A man who has an acquantance in Saunders county, who can make a down payment on a small truck. Permanent work Call 26 and ask for Mr. Jarvis or come to the store for an interview.
> O'BRIEN-DAVIS AUTO CO.

THIS want ad recently appeared in a local daily at Fremont, Neb. Back of it is a story of how a business concern was sold on an idea presented to it by an enterprising truck salesman. The sequel is a story of how applicants were sold a truck with a job.

Glen M. Jarvis, lone truck salesman for the O'Brien-Davis Auto Co., Omaha, distributor of Dodge Brothers trucks, is the man who works the want-ad idea. The idea is his own.

Jarvis' first step in the plan is to approach the head of some business concern that seems ripe for a change in its plan of delivery. A case in point is a creamery operating in Fremont, Neb. This company delivered over a large radius, reaching the territory with a fleet of trucks operated by hired drivers. The plan had not been satisfactory and Jarvis knew it. Some of the drivers were careless, some loafed on the job, others "knocked down" a little here and there and any were apt to resign suddenly without warning, leaving the company to fill in the vacancy as best it could without any time for a careful selection.

In presenting his proposition Jarvis put the following question squarely up to the manager: "Wouldn't it be much more satisfactory to let your routes out on contract to reliable men owning good equipment?"

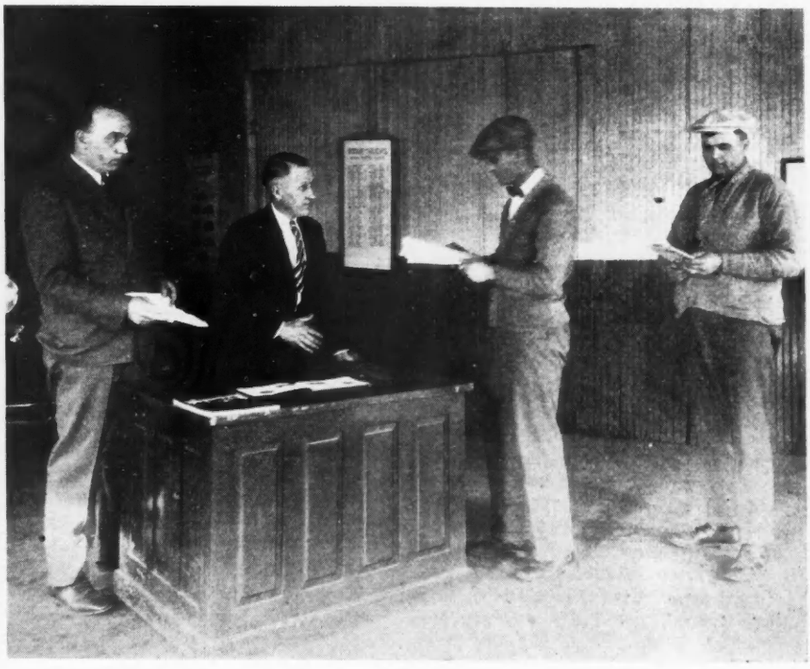
The manager admitted that it would, but asked how he was to get men who have anything but old rattletraps for rigs. Whereupon Jarvis explained his plan, which has become the means of selling many new trucks and at the same time has helped many operators out of difficulties.

"I'll guarantee to get the man," said Jarvis. "And he'll be a first-class man, a man equipped with a truck that will serve your business as it has never been served before. All you need to do is to give me your word that you will not contract with him unless he uses the truck which we supply." With the agreement settled Jarvis was ready to search for his man.

"While the word of the business man is good," Jarvis explained, "more care must be exercised in dealing with applicants. Some would try to get in with just any old kind of a truck, preferably one of the used class, and badly used at that. But the business man, aside from the agreement, with hauling to let on contract, realizes the necessity of tried and true equipment on the job, turns away any applicant who would sidestep my plan.

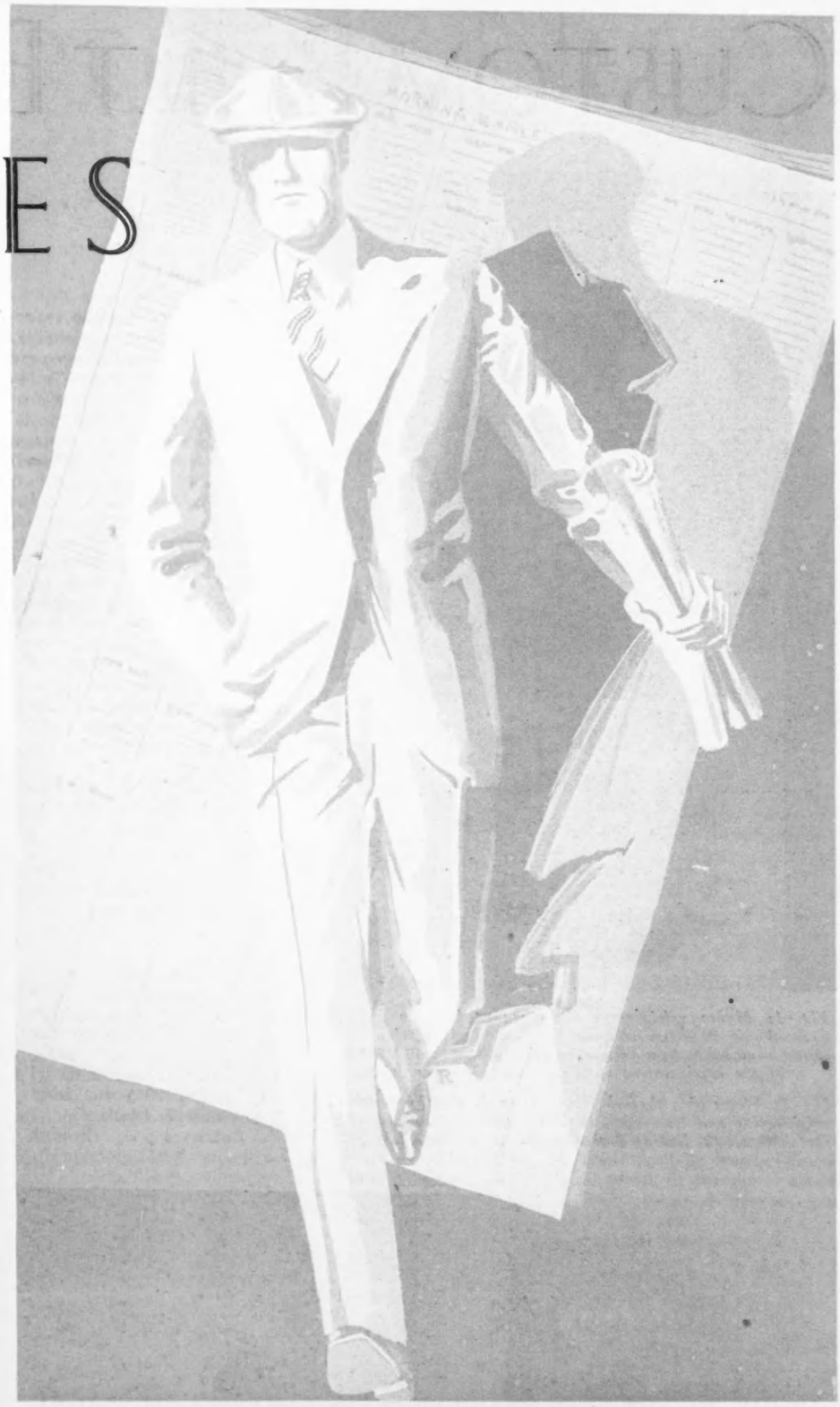
"The advertisement is open and above board," Jarvis continued. "There is nothing of a blind nature about it except, of course, that detailed information cannot be given. Those interested know that they will be required to make a payment on a truck if they connect with the employment mentioned, and as a rule, investigate in person. During the interview the whole plan is laid bare."

Jarvis has had as many as 20 appli-



Glen M. Jarvis interviewing applicants responding to a want ad inserted in the Fremont Daily. C. M. Barnum, manager, Fremont branch of O'Brien-Davis Auto Co., is at the left

SALES



cants to one of these little feelers, and a good many of them proved to be real prospects for motor trucks, even though another beat them to the business opportunity immediately open.

For use in connection with the plan, Jarvis prepared an application form, which when filled in is a complete record of the applicant. The one who seems best fitted for the opening is sent with a letter of introduction to the manager of the company that has been sold on the idea. As a rule the man that C. M. Barnum, the manager, or Jarvis endorses also pleases the manager, in which case the applicant makes his payment on a truck, and leaves, feeling sure that he is going to make money enough to meet his payments. While the truck selling company does everything within its power to provide the driver with a permanent job, it does not guarantee an income against unforeseen contingencies and to protect itself inserts words to that ef-

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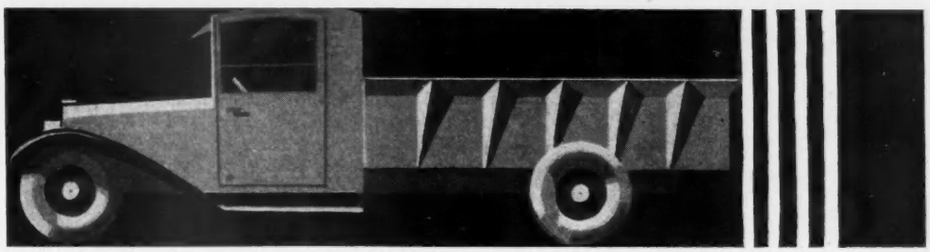


CUSTOM BUILT BODIES

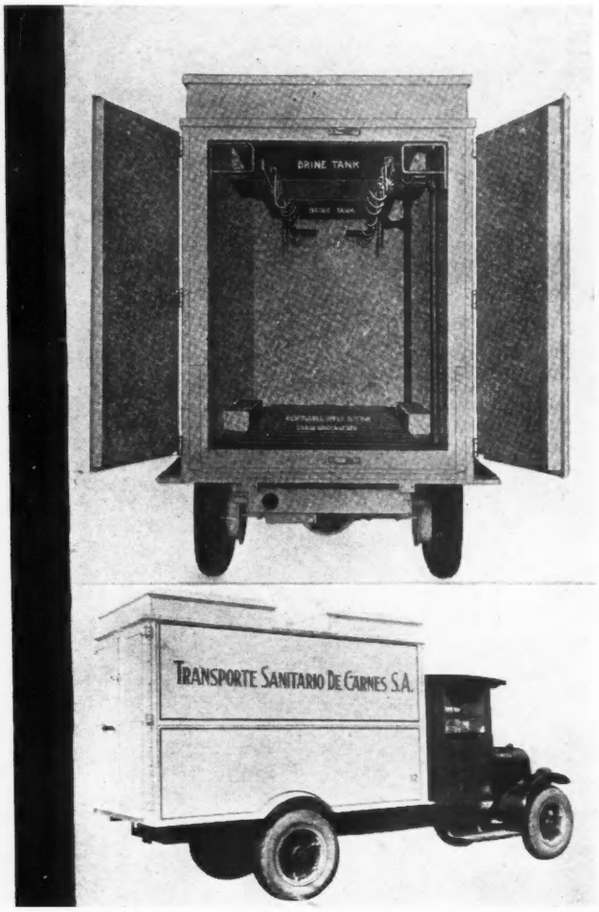


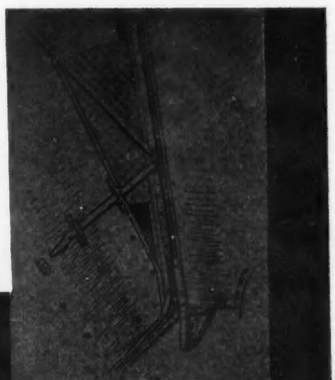
Fig. 1: Myers refrigerator body mounted on a 2½-ton Federal for Mexican abattoir service. The interior view shows removable floor, trolleys and tracks, tanks and pipes of the refrigerating system. Note sill extensions

A BODY for the transportation of quartered meats or any other perishable product over long or short distances is being produced by the Myers Body Co., Buffalo, N. Y. (see Fig. 1). Design is such that low temperatures can be held for 24 hours with only 600 lb. of crushed ice and salt. It is built in two sizes for mounting on 2½ and 5-ton chassis with or without wheel houses.

The body is mounted on a patented steel sill of galvanized steel angles to which it is fastened from the outside so that it is unnecessary to disturb inside lining when removing the body. The sills extending about 3 in. from the side of the body also serve as a bumper rail. The bottom of the body consists of four sections: The upper section, which is constructed of oak and is removable; the air chamber between the upper section and the pan; a seamless copper pan which is inserted in such a manner as to prevent cracks and tears; and a layer of cork board which insulates the entire bottom against the heat of the street.

The top consists of ⅞-in. cypress, insulated with cork board, through which project two insulated hatchways for carrying brine pans. These pans or tanks are accessible from the outside only and are suspended so as to prevent body warping. The sides are cork insulated and lined with galvanized sheets and sealed against water. Melting brine is drained by two pipes controlled by brass valves under the tanks.

Meat is suspended from wheeled trolleys which run on tracks fastened at the front and rear to the top. Trolleys may be secured at any point along the track by a lock pin chained to each hook. The 2½-ton body has two tracks and the heavier model three and each track carries eight trolleys. All tracks are located 12½ in. from the side, while the center track of the heavier model is located 22½ in. from each outside track.



Entrance is through

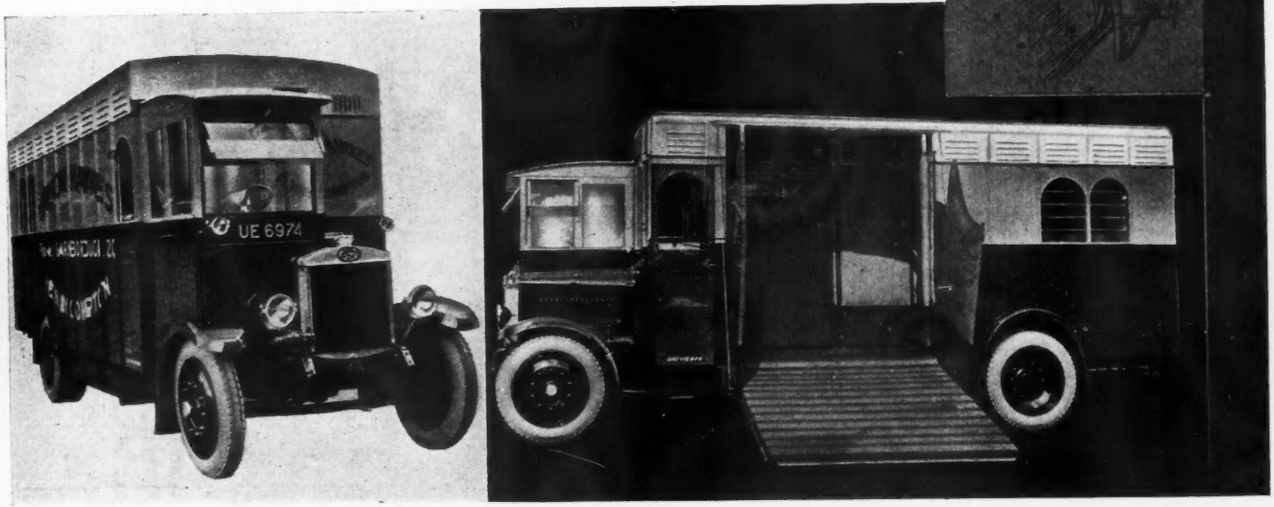


Fig. 2: Views of a three-horse body, made by the Dartford Engineering and Carriage Co., Ltd., London, England. The sketch shows the linking device employed for the safety gates

FOR SPECIAL NEEDS

two folding doors which open to 270 degrees. They are heavily insulated and of the refrigerator type, being equipped with compressor hinges and a double locking compressor lock. Solid rubber gaskets are used on the battens.

The Dortford Engineering and Carriage Co., Ltd., 23 Hythe Rd., Willesden, London, N. W. 10, recently designed a special three-horse body (see Fig. 2) for the transportation of thoroughbreds. It is mounted on a low-frame, 183-in. wheelbase chassis and is built of aluminum panels riveted to a frame of duralumin. The ramp and safety gates of this job are particularly interesting. The ramp, which is fitted on the left side, is balanced by sash weights sliding in long vertical tubes inside of the body to permit easy one-man operation. It is hinged several inches below the level of the floor, but slides up to floor level as it is lowered and when raised is held in position by a spring catch.

To prevent a horse from slipping through the wide opening that would exist between the bottom of a gate swinging vertically from the side of the body and the edge of the ramp, the gate on this job is designed so that it falls flush with the ramp. The construction which permits the gate to fall from the vertical is shown in the accompanying sketch.

Partitions and fittings in the body are secured by quick-release, tubular bolts or clips and all hinged handles are leather covered to prevent rattle. The roof is lined with deep pads to prevent the animals from injuring their heads. Comfortable seats for the grooms are provided, two at the rear and one in front. Saddle-racks, clotheshooks, locker room for fodder, drop-windows, electric lighting and a bell for communicating with the driver are among the accessories.

Equipment for the horses includes detachable metal mangers, breast straps and thick padding throughout the 30-in. stalls. Holes are drilled at various points in the floor for drainage and the walls and floor are treated with bitumen for protecting against the action of ammonia. The body is 23 ft. 6 in. long, 7 ft. 2 in. wide and height, 7 ft. 2 in. The courtesy of *"The Commercial Motor,"* London, Eng., in furnishing the photographs and data is acknowledged.

The Knightstown Body Co., Knightstown, Ind., recently built to specification emergency ambulances for the Charity Hospital of New Orleans and the City Hospital of Indianapolis equipped with first-aid equipment, removable beds, collapsible cots, pulmotors and upholstered seats for doctors. (See Fig. 3.)

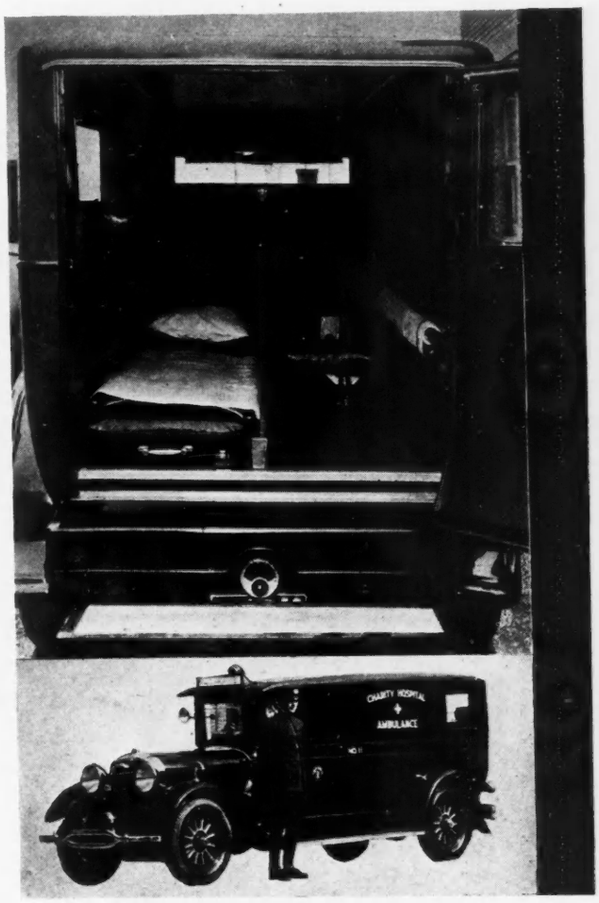


Fig. 3: Interior and exterior views of Knightstown Ambulance bodies

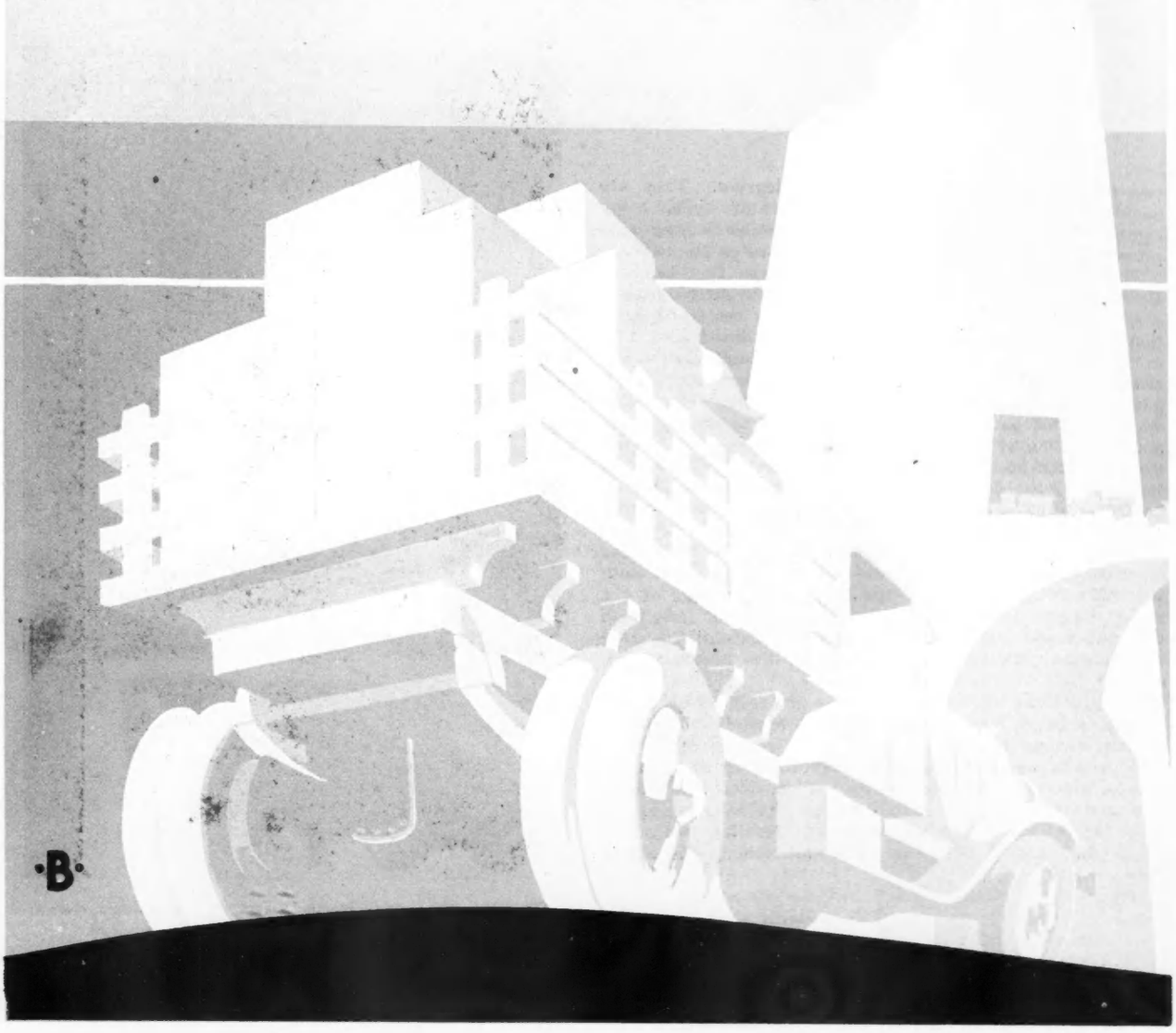
While the lay-out of the interior of these bodies vary according to the requirements of the hospitals, body-work is identical. Frames are constructed of dry white ash. All joints are glued, screwed and reinforced by irons. Panels consist of 20-gage steel with all joints in the metal strain welded. Interiors are finished in polished veneer, varnished to permit washing with chemicals.

Built in the partition between the driver's compartment and the interior are cabinets for carrying first-aid kits, splints, bandages, etc. The number and size of these compartments depend upon individual hospital requirements. The accompanying interior view is that of the Indianapolis job and shows only one cabinet with drop-type door, located just under the partition's sliding windows. This job was also designed to carry two beds, one of which is carried on the left side of the body for use in emergencies. The side rails of the beds

(Turn to page 58, please)

Fig. 4: Mounted on outriggers this 18-ft. van body has no cross-members or sills

DEVELOPING JOINT-



THE motor truck lines operating from the Central Union Truck Terminal at Indianapolis, Ind., maintain daily or more frequent service between Indianapolis and several hundred cities and towns in Indiana and Kentucky. The lines are all under the supervision of the Indiana Public Service Commission, operating under franchises from that body.

The freight forwarded through the Central Union Truck Terminal is billed on standard shipping papers used by all truck operators using the papers. These papers are consecutively numbered in order to permanently identify the transactions, and they are made out in duplicate form by the billing clerks of the terminal company. One copy goes to the consignee of the goods, another is retained by the terminal company as its record, and the third copy is kept by the motor line operator as his record. An idea of the rate of growth of the Central Union Truck Terminal is obtained from the statement of Tom Snyder, its manager, that one hundred bills a week were cleared in 1923 and one thousand a week in 1928, and more in 1929.

A copy of these shipping papers is shown herewith. A complete set includes the invoice, which goes to the consignee, the receipt retained by the carrier after the consignee has signed for the shipment, and the office copy, which is retained by the terminal company as its receipt for the goods after the motor carrier has signed it.

This system of billing has the advantages of establishing a complete identification of each shipment and setting up a complete series of receipts for the goods. It is simple, accurate and economical.

The motor truck lines operating over the routes radiating from the central truck terminal strive to obtain orders from the buyers of goods in the cities they serve which are addressed to the distributors who have sold the local merchants the goods, directing the shipment of the freight via the designated freight line. The original copies of these routing orders are placed with the shippers. Memoranda of the instructions are retained by the consignees and by the carriers.

Many railroad and steamship carriers also use routing orders of this type in order to build up a permanent body of patronage and to keep the wishes of the consignees before the shippers. A typical routing order shows:

1. The date of execution. 2. The name and address of the distributor or manufacturer to whom it is addressed. 3. A request or order to ship via the line designated; either (a) Indefinitely,

TERMINAL TRAFFIC

And Insuring Efficient and Economical Service by Triplicate Shipping and Routing Instruction Papers

The fourth instalment of a series on cooperative truck terminals

By G. Lloyd Wilson

Professor of Commerce and Transportation, University of Pennsylvania

Rendered in triplicate the shipping papers, the invoice of which is shown at the right top, provide a complete series of receipts and establish identification of each shipment. Below: Routing instructions furnished shippers for their convenience

(b) Until further notice, or (c) Until a fixed date in the future. (d) One specific shipment. 4. The signature of the consignee. 5. The address of the consignee. 6. The point of shipment. 7. The destination. 8. Instructions with respect to packing, insurance, time of delivery or other necessary detail.

A routing instruction form used by the Denny Motor Transfer Co., Inc., operating through the Central Union Truck Terminal, at Indianapolis, and the Central Truck Depot, at Louisville, serving these two cities and intermediate points is also shown herewith. This carrier maintains daily service in

(Turn to page 58, please)

○ CONSIGNED THROUGH ○

WAREHOUSE DISTRIBUTING CORP.

INDIANAPOLIS

OPERATING

CENTRAL UNION TRUCK TERMINAL

"TRUCKS EVERYWHERE ALL THE TIME"
PHONE LINCOLN 4839

Via _____ Date _____ 192 _____ Nº 8903

INVOICE

All correspondence to Ind'pls terminal or phone local depot

From _____ To _____

Consignor _____ Consignee _____

Address _____

Number Packages	Description of Articles	WEIGHT Subj. to Cor.	RATE	Transportation	Charges
				Value	
				Pick-up	
				Delivery	
				C. O. D.	
				Transp'on	
VALUE				TOTAL	

PREPAY ☐ COLLECT ☐

1

THIS IS YOUR INVOICE KEEP FOR YOUR FILES, WE DO NOT ITEMIZE ON STATEMENT

Denny Motor Transfer Company, Inc.

Indianapolis, Ind
Central Union Truck Terminal
415 South Pennsylvania St
Phone, Lincoln 8086

GENERAL OFFICE
329-331 State Street
Indianapolis, Ind., Louisville, Ky., Bedford, Ind
P. S. C. Franchises No. 881-M and 914-M

New Albany, Ind

Louisville, Ky
Central Truck Depot
110-118 North Floyd Street
Phone, City 857-858

ROUTING INSTRUCTIONS

M _____ Date _____ 192 _____

GENTLEMEN:
Until further notice, please route our shipments via Denny Motor Transfer Company.

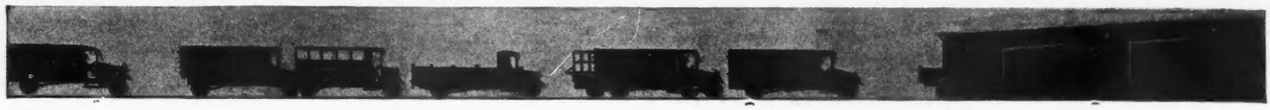
Signed _____

By _____

Shipping Point _____

Store Door Delivery **Cargo Insured**

"BY SERVICE WE GROW"



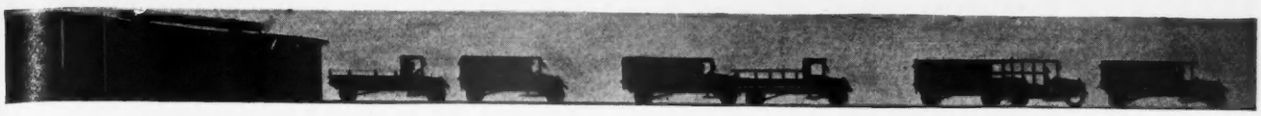
NEW TRUCK SALES

Complete Figures for February, 1929; Totals for

	Acme	American La France	Atterbury	Autocar	Brockway	Chevrolet	Diamond T	Dodge Bros.	Fargo	Federal	Ford	G. M. C.	Gotfredson	Gramm	Indiana	International	Larrabee	Mack	Moreland	Pierce-Arrow	Relay	Reo	Republic	Rugby	Schacht	Selden	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Total Sales by States Including Miscellaneous
ALA. Feb.						104		8		1	93	4				17		1				4		1					1	4		239
†2 mo.						205		20		1	214	11				29		2				6		1					2	4		496
ARIZ. Feb.						64		16	1		72	10				22			1			3		3				5			1	198
2 mo.						95		45	1		139	23				49		1	2			8		5				11	4	2	3	390
ARK. Feb.						135		11	1	2	185	4				28						5		1					3	3		379
March						217	1	19	1		229	4				25						3							1	1	4		507
2 mo.						215	1	47	1	5	500	23			1	82						20		2						9	11		920
CAL. Feb.		1		10		431		163	5	14	1,177	65	4			37		17	57			63	3	10			26	5	8	9	32	1	2,219
2 mo.	9	1		18		672	2	418	6	41	2,426	182	8		1	88		55	107	2	1	158	5	23			63	18	28	13	78	4	4,610
COL. Feb.						116		35	1	1	96	15	1			28						6		3					1		6		309
2 mo.						250		118	1	5	314	61	1			99		4				19	2	5					2	3	14	3	904
CONN. Feb.				1	4	129	2	36	4	3	132	7				22		13		1		41	1				1	5	3	4	3		412
2 mo.				2	7	195	2	61	9	4	208	20				32		26		2	1	56	1	1			1	9	7	7	4	1	657
DEL. Feb.					1	32		3			42	3				4		2				3								1		91
March						65		4			57	11				7		1		2		4	1	1						4		157
2 mo.				1	1	46		8			77	7				8		3				4		1						3		159
D. C. Feb.						38	3	1			76	1				1		1				2								2	1		126
2 mo.					2	56	4	4			142	6				3		3				3						1		3	3		233
FLA. Feb.						129		11		1	164	5			5	12		4				2							1	4	4		342
2 mo.						194		23		1	299	5			5	18		4				6							2	4	5		566
GA. Feb.						293		15		1	231	4			7	12		1				3								6	9		584
2 mo.						402		25		2	393	4			12	18		2				4								10	16		890
IDA. Feb.						16		9			32					6						3	1	3									73
2 mo.						30		15			70	1				16		1				5	1	4						2	1	151
ILL. Feb.		1		5		611	104	183	13	23	825	112	15		20	277		27		2	10	53	2	5			13	6	3	26	19	4	2,477
March		2		10		997	142	185	10	25	1,149	94	5		17	266		46		1	3	76	2	16			17	5	4	26	26	4	3,222
2 mo.		2		13		1,011	250	381	32	31	1,807	233	36		44	590		67		3	15	125	6	9			20	10	6	37	52	9	5,078
IND. Feb.						416	8	95		8	393	58			21	98		2		1	1	41		1				4	5	8	7		1,177
2 mo.		1		1		661	13	172	1	17	880	100			38	176		2		1	4	79		4				12	14	19	18		2,226
IA. Feb.						361	2	36	5	2	192	7			1	98		3				14	1						1	5	2		730
2 mo.				1		509	2	69	13	4	389	19			3	195		6			1	25	1	3					1	6	5		1,256
KAN. Feb.						162	1	59	1		195	20			1	51						8							1	9	4	1	517
2 mo.						224	2	104	6		327	43			2	95		3				16		1		1			2	16	10	1	863
						149	1	19	4		116	16			1	25		2			1	7		2					2	2	1		350
2 mo.						270	7	62	5		305	44			7	71		6		2	7	24		3	2				7	10	8		844
LA. Feb.						152	1	30	1	2	222	8			1	37		4				1								3	4	1	467
2 mo.				2		233	1	48	1	2	437	18			1	64		4				7								4	8	1	832
ME. Feb.				1		57		8			79					4		1				1							3			1	155
2 mo.				1		74		10			136	2				4		1				3		2					3			1	237
MD. Feb.				6	1	112	1	18		2	119	16				17		29			1	16					1	1	7		1	7		362
March		3		16	3	174	10	51		8	208	20				17		19			2	24	1					6	5		1	12		586
2 mo.				7	1	200	7	41		6	295	28				29		39			3	28		1			1	1	9	1	3	20		733
MASS. Feb.		4		19	10	216	5	56	8	4	404	48				38		30		3		50			2		4	6	2	9	9	1	938
2 mo.		4		34	17	342	9	130	17	9	840	85				77		48		3		101			3		9	9	5	14	23	2	1,796
MICH. Feb.	2			5	2	576	3	81	12	16	766	45	3			43		8		3		57	1	6					2	10	11		1,667
2 mo.	11			9	2	944	20	174	25	37	1,500	93	8			110		15		4	1	100	1	8	1				5	21	24	1	3,140
MINN. Feb.						108	2	19	1	1	270	17				47		2				19		1					2	2	5	1	497
2 mo.						159	2	57	3	3	489	32				75		6				31		1					2	7	9	1	880
MISS. Feb.						80		6			53	1			1	11						1											153
2 mo.						123		14			104	2			1	26						8											278
MO. Feb.				2		467	54	134	4	23	688	69			10	99		8				36	5	4			2		2	18	11		1,649
2 mo.				4		560	61	170	4	23	829	83			11	148		19			1	50	6	5			3		3	21	14		2,032
MONT. Feb.				3		81		30		1	140	10				38		1				8	1	2					2		2	1	325
mo.				3		136		51	1	3	282	16				67		2		1		16	2	7					2	2	5	2	603

† Includes only Jan. and Feb. totals.

Figures in this table are compiled by R. L. Polk & Company, of Detroit, except Illinois, which is compiled by the Automobile Sales Record Corporation, of Trenton. Readers desiring



BY MAKES AND STATES

Two Months, and Partial Reports for March, 1929

		Acme	American La France	Atterbury	Autocar	Brockway	Chevrolet	Diamond T	Dodge Bros.	Fargo	Federal	Ford	G. M. C.	Gotfredson	Gramm	Indiana	International	Larrabee	Mack	Moreland	Pierce-Arrow	Relay	Reo	Republic	Rugby	Schacht	Selden	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Total Sales by States Including Miscellaneous
NEB.	Feb.						281		36	2		214	29			3	76		5				15							4		2	1	673
	2 mo.						448	2	77	2		455	57			8	172		8				25		2					4	1	6	2	1,281
NEV.	Feb.						22		12	1		42	1				4			3			2									1		89
	2 mo.						43		32	1		74	7				8			6			2								2			179
N. H.	Feb.						37		4	1		49	2								1		2									2		98
	March				1	1	71	1	10			88	6										3								3			195
	2 mo.						40		5	1		55	2				4		1		1		4						6		2			112
N. J.	Feb.	2	2		19	11	366	5	49	11	15	484	53	1		2	37	1	34		6	3	33		2			7	6	12	19	24	6	1,284
	2 mo.	2	2		28	19	552	8	58	15	21	819	80	2		2	53	2	64		10	5	72		4	2	3	12	9	16	29	38	7	2,061
N. M.	Feb.						26		2			28	2				3						2									1		64
	2 mo.						57		22		3	64	5			2	18						6							1	3		182
N. Y.	Feb.	2	23	5	19	97	762	28	152	33	18	999	73			1	95	4	82		10	1	82	1	6		4	9	56	1	34	43		2,665
	2 mo.	6	25	8	39	192	1,292	60	426	77	35	1,875	143			1	222	14	148		27	5	176	2	20	1	14	20	92	9	50	73	1	5,099
N. C.	Feb.				1		350		60	3	1	339	21				20		7				4	1	1				2	1	10	4		828
	March	3			3		412		40			272	15			1	13		9				6	2	1					3	5		1	791
	2 mo.	7			2		554		128	4	5	714	63			5	46		10				15	2	4				3	2	13	7		1,603
N. D.	Feb.						42		4			47	6				42						5		1					1	1			149
	March						68		8		2	56	10				62				1		6		1						2			226
	2 mo.						105		12		1	126	15				93						8		3					1	1		1	366
OHIO	Feb.	3			6	1	616	4	68	11	14	671	35	3		10	63		18		6	2	37			3			7	7	30	30	9	1,676
	2 mo.	8			12	2	1,070	19	170	19	27	1,295	92	4		21	159		30		7	3	94	2	5	3	2	2	11	14	54	70	10	3,243
OKLA.	Feb.						325	8	63	6	3	366	17			4	69		4				11		1		4			4	10	13	1	909
	2 mo.						469	10	124	12	15	688	32			5	129		13			1	27		2		4		4	5	25	20	1	1,590
ORE.	Feb.						100		23	1	4	159	26				16		3	1			9	2	1					1	3	4		356
	2 mo.						181		55	4	10	421	49				39		6	5			19	4	5					7	6	18		844
PA.	Feb.	5	3	1	18	20	593	18	145	16	9	950	61				69	2	42		2	13	66	12	4			14	18	7	22	30	1	2,159
	2 mo.	8	3	1	54	53	910	40	336	33	14	1,850	142	10			167	3	87		4	22	126	18	10		2	36	31	22	44	75	5	4,161
R. I.	Feb.				9		30		23	2	2	48	5				6		4				12							1	1	1		144
	March				5	1	85		31	3	3	79	16			3			6				17						3		4	3		260
	2 mo.				11		49	1	44	2	5	92	14				14		5		1		27		2				4	1	1	3		278
S. C.	Feb.						135		10			111	6			1	14						1							1	1			280
	March						186		23		9	113	5			1	10														1			349
	2 mo.						292		40	1	4	318	22			1	42						6		2				1	1	4	3		737
S. D.	Feb.						73	2	27			102	11	1			80		1				12		4						2	1	2	319
	March						111	1	7			103	5				58						4								2		1	296
	2 mo.						120	4	41	1	1	207	20	1		1	136		5				19		6						2	1	2	568
TENN.	Feb.						159		14		2	106	18				9		7				9							1	1	4		330
	2 mo.						320		42	3	7	221	51				24		12				17	2						6	1	6	1	713
TEX.	Feb.				4	1	786	2	119	4	6	910	50			10	161		12		1	6	35		3					2	11	18	3	2,149
	2 mo.		2		11	1	1,256	18	209	15	12	1,811	117			14	366		25		2	17	71		10				4	11	23	41	3	4,055
UTAH	Feb.						32		9			45					5		1															92
	March	1					61		11	1		108	3				13		3				4		2					1	1	4		213
	2 mo.						55		28			124	4				19		7	1			5		1					2	1	1		248
VT.	Feb.						32		9	1		44	3				7		1				4						1	3				105
	2 mo.						44		19	3	4	66	10				14		2				10						2	3	2	2		181
VA.	Feb.				1		165	1	21		5	220	18				17						9	3	1				2		1	5		469
	March				2		423	2	34		4	394	14			6	41		5			1	22	2	4				4	1	8	10		979
	2 mo.				3		251	2	66	1	15	494	35			6	54		3				22	13	1				3	1	4	17		992
WASH.	Feb.						52		24	2	1	152	12				15		8			1	5		3					1	1	10		297
	2 mo.						230		107	4	6	544	54				65		13	1		1	50	1	8					5	8	20		1,158
W. VA.	Feb.						86	3	13	1	1	96	8				10						10		1				2	1		2		236
	March						142	2	28			161	11			3	34					3	9	1	1	1			2	1	2	1		403
	2 mo.						131	4	28	4	2	217	19				36						21		2				2	2	2	4		479
WIS.	Feb.						168	18	28	3	4	347	15				40		3				17		3			10	7	3	6		4	694
	March						366	18	46	4	13	355	20				66		3		2	1	14		5			20	7	7	5	7	1	962
	2 mo.				1		253	26	66	9	12	777	38				67		6		1		35		5			20	12	6	9	1	8	1,386
WYOM.	Feb.						15		12			22	5				9						1											64
	2 mo.						16		29			53	6				13						3		1									121
Total Sales by Makes.	Feb.	14	34	6	129	148	10,288	276	2,009	159	190	13,313	1,022	28		99	1,939	7	388	62	36	39	830	34	73	5	9	87	134	93	277	339	39	32,565
Total	2 mo.	51	40	9	257	297	16,544	577	4,431	337	393	26,762	2,218	70		192	4,125	19	764	122	71	88	1,762	69	179	12	27	187	246	219	498	749	71	62,422

which is compiled by the Robinson's Advertising Service, of Springfield; and New Jersey, town and county lists of owners in any section may address any of these three companies.

OPERATING COSTS

An Analysis Giving Costs Per Mile Per Truck for Gas, Oil, Tires and Maintenance in 11 Classifications

EVERYONE who uses or furnishes motor transportation is interested in the cost of operating trucks. Private, contract and for-hire operators have a common interest with truck dealers in achieving the ideal of low-cost transportation. This obviously will depend upon how much it costs to operate a truck and the amount of work the truck does while operating.

Overhead and other fixed charges cause much difficulty in judging figures showing total costs. Depreciation is determined in many different ways; rent charged to truck fleets ranges from nothing to a stiff figure for loading space in a high-rent retail district; supervision is an account of many meanings; license fees are far from uniform, and insurance and miscellaneous charges likewise vary. There are four items of the total which represent money paid out rather than a calculated charge. These — gasoline, oil, tires and maintenance, comprising operating costs —can be compared more easily than many other items which go to make up a fleet budget.

Operators naturally seek to make comparison between their operating costs and those of other operators so that they may judge how well their trucks are doing. They realize that there are many variables in individual operations which must be considered before

Number of Trucks in Fleet	Average Miles per Gallon	Annual Mileage per Truck	Gas Cents per Mile per Truck	Oil Cents per Mile per Truck	Tires Cents per Mile per Truck	Maintenance Cents per Mile per Truck	Total Operating Costs Cents per Mile per Truck
Delivery							
131	13.96	11,114	1.31	0.12	0.53	1.62	3.58
7	14.11	9,794	1.21	0.12	0.63	2.68	4.64
1	11.23	4,344	1.63	0.15	0.53	9.50	11.81
5	15.45	11,987	1.08	0.06	0.43	1.29	2.86
28	12.72	11,154	1.41	0.14	0.56	2.13	4.24
1	9.90	4,643	1.55	0.08	0.53	1.92	4.08
173	13.71	11,010	1.31	0.12	0.59	1.78	3.70
1-ton Pneumatic							
90	9.20	7,900	1.94	0.37	0.99	0.64	3.94
102	7.50	5,041	2.14	0.29	1.00	1.70	5.13
1	9.10	12,225	2.20	0.19	....	0.43	....
32	9.53	9,238	1.79	0.21	0.46	2.03	4.49
1	13.06	7,520	2.07	0.39	1.47	1.59	5.52
57	10.03	9,690	1.73	0.13	0.53	3.18	5.57
15	9.61	12,116	1.78	0.15	0.77	2.09	4.79
1	12.90	4,062	2.82	0.37	6.88	9.24	19.31
7	9.30	8,340	2.09	0.24	0.20	1.00	2.63
8	8.70	7,856	1.86	0.21	1.83	2.70	6.60
1	6.50	10,338	3.10	0.32	....	0.05	....
1	6.44	12,035	3.73	0.24	3.30	9.03	16.30
316	8.90	7,664	1.95	0.26	0.87	1.77	4.85
1-ton Solid							
1	9.90	10,191	1.72	0.13	0.40	0.79	3.04
1	7.05	9,242	2.59	0.48	1.18	4.29	8.54
3	8.20	7,664	2.20	0.59	4.08	2.30	9.17
3	9.46	1,500	2.87	0.65	1.52	8.17	13.21
8	7.70	5,865	2.44	0.54	2.29	4.30	9.57
1½-ton Pneumatic							
5	4.30	3,071	3.74	0.48	0.61	7.25	12.08
27	6.10	6,793	2.49	0.40	1.37	4.25	8.51
2	5.40	9,037	3.91	0.25	....	5.20	....
34	5.99	6,380	2.76	0.40	1.25	5.03	9.44
1½-ton Solid							
11	8.33	11,625	1.81	0.17	0.35	1.21	3.54
7	2.50	2,376	8.61	1.68	....	4.08	....
1	6.80	11,220	2.82	0.71	....	5.30	....
2	3.30	1,938	4.42	0.67	....	19.88	....
1	5.45	12,143	3.18	0.30	1.33	2.21	7.02
22	6.85	7,807	4.32	0.72	0.43	4.05	9.52
2-ton Solid							
1	7.00	9,998	3.00	0.17	3.27	....	....
1	3.30	2,940	5.14	0.54	6.65	5.13	16.86
6	2.80	2,858	7.18	1.68	0.01	4.15	13.02
16	2.00	3,402	8.63	1.38	1.83	7.16	19.00
3	3.50	6,088	6.33	0.86	....	5.61	....
1	4.6	2,873	3.73	0.63	....	9.10	....
6	1.70	2,664	12.59	2.08	0.09	3.05	17.81
15	1.50	2,530	11.20	1.67	0.08	4.02	16.97
1	2.90	2,137	6.78	0.47	....	20.90	....
50	2.08	3,234	9.24	1.51	0.89	5.51	17.15
2½-ton Solid							
1	5.10	15,234	4.00	0.17	1.50	5.00	10.67
1	4.60	8,269	2.96	0.25	2.42	1.43	7.06
1	7.50	11,062	3.72	0.26	2.71	3.75	10.44
1	3.90	9,861	5.65	0.54	2.05	10.57	18.81
1	2.20	2,950	9.31	0.85	....	18.22	....
5	5.32	9,475	5.13	0.41	2.17	7.80	15.51
3-ton Solid							
148	1.70	3,912	10.04	1.21	0.27	1.38	12.90
185	1.60	4,089	10.13	0.86	2.96	5.60	19.56
3	2.40	3,406	7.82	1.53	0.10	2.15	11.60
3	1.30	2,274	11.89	1.66	0.29	19.88	33.72
3	1.70	4,152	10.41	0.78	....	2.57	....
3	1.60	3,248	10.48	1.38	0.90	10.41	23.17
1	2.00	7,640	11.39	1.04	1.53	1.09	15.05
346	1.63	3,995	10.09	1.03	1.75	3.89	16.76
3½-ton Solid							
2	1.50	1,549	9.82	0.73	....	11.90	....
1	4.00	13,904	5.06	0.33	2.40	4.36	12.15
3	3.07	5,667	8.23	0.59	2.40	9.38	20.60
5-ton Solid							
1	1.80	5,610	9.48	3.46	....	0.02	....
6	1.00	764	14.66	2.91	....	28.47	....
1	2.80	13,056	8.84	0.55	2.21	5.02	16.62
1	2.30	8,532	10.51	0.20	4.62	19.10	34.43
1	4.00	14,690	5.01	0.19	2.56	6.56	14.32
1	2.70	7,300	8.38	1.98	4.47	6.16	20.99
1	2.80	5,745	6.32	0.76	1.61	9.98	18.67
12	1.63	4,959	11.37	2.05	3.09	18.14	34.65
7½-ton Solid							
1	2.20	11,972	11.55	0.44	3.65	10.06	25.70

FOR 972 TRUCKS

making direct comparison, but nevertheless much can be learned by looking over "the other fellow's figures." The larger the number of trucks reported the more valuable is the average figure for comparative purposes.

Operating costs for 972 trucks, covering more than 7,000,000 miles of operation, are given in the accompanying tables. Included in the tablation are 173 light delivery cars; 316 1-ton trucks on pneumatic tires and four on solids; 34 units of 1½-ton rating on pneumatic tires and 22 on solid tires. From 2 tons upward all trucks reported are on solids, the number of units being 2-ton, 50 units; 2½-ton, five; 3-ton, 346; 3½-ton, three; 5-ton 12, and one 7½-tonner. Cost figures for two vans are given separately, and in this case income is also given.

The truck cost figures are derived from operating cost statistics compiled by the Engineering Experiment Station, Iowa State College, Ames, Iowa. The van income and expense figures are furnished by T. A. Jackson, Jackson Storage & Van Co., Chicago, Ill., chairman

(Turn to page 44, please)

AFTER HOURS

$27,784.80

About this time last year the Central Railroad of New Jersey determined to substitute one motor truck for a round-trip way freight steam train. This operation is believed, according to the railroad's general superintendent, to be the first motor truck in actual line service to be owned and operated directly by a railroad, coordinated with a freight train schedule and under the direct control of the operating department of the railroad.

What happened as the result of this long-delayed venture? Well, in 306 working days the truck showed a net saving over the rail service of $27,784.80. Here is an economy worthy of consideration, and an experience other railroads should look into carefully. As the *Railway Age* points out, "no independent motor truck operator could make $28,000 a year by operating one truck. But a railroad can—and has."

It's about time, really, that the railroads buried their shortsightedness because they'd benefit by the obsequies.

Looks

"The man today is becoming as insistent upon style for his commercial vehicle as for his own private passenger car, often more insistent," according to O. L. Arnold, vice-president directing sales of General Motors Truck Co. "He knows that the modern appearance of his trucks has advertising and prestige value for his business, and that his trucks either build good will or make an unfavorable impression upon the hundreds of his prospective customers who see them in their daily work."

The observations of Mr. Arnold are pertinent.

All that we can add is that if there are men today who aren't paying any attention to the appearance of their trucks they are probably blinded by seeing too much red.

Iowa

There are men in the industry who, at the mere mention of a rate regulating provision being incorporated in a piece of truck legislation, throw up their hands in horror and shake their wise heads sadly. This became evident once again when the regulatory bill sponsored by The Iowa Truckers Association, and passed by the state legislature, was published in detail.

This law places authority to regulate in the hands of the Board of Railroad Commissioners; empowers it to "fix or approve the rates, charges and classifications after complaint has been filed," to "require the filing of annual and such other reports as it may deem necessary," and to inspect at any time the equipment of a truck operator. The law further stipulates that "no permit shall be issued until and after the applicant shall have filed with the commission an insurance policy, policies or surety bond in such amount as the commission may deem necessary to protect the interests of the public with due regard to the number of persons and amount of property involved."

Now to anyone who has kept abreast of state truck regulatory legislation, there is nothing unusual about the Iowa law. It is similar to that of Pennsylvania and other states. The only unusual thing is that the law was sponsored and fought for by an association of truckmen. These truckmen knew what they wanted and went out and got it, instead of waiting to have it crammed down their throats along with provisions which they might have found highly unpleasant.

The fact that the administration of the law is placed in the hands of the Board of Railroad Commissioners isn't as alarming as it appears. They are the public service commission of Iowa. The rate section is merely rate regulating, not rate making. The liability and inspection clauses are by no means unique.

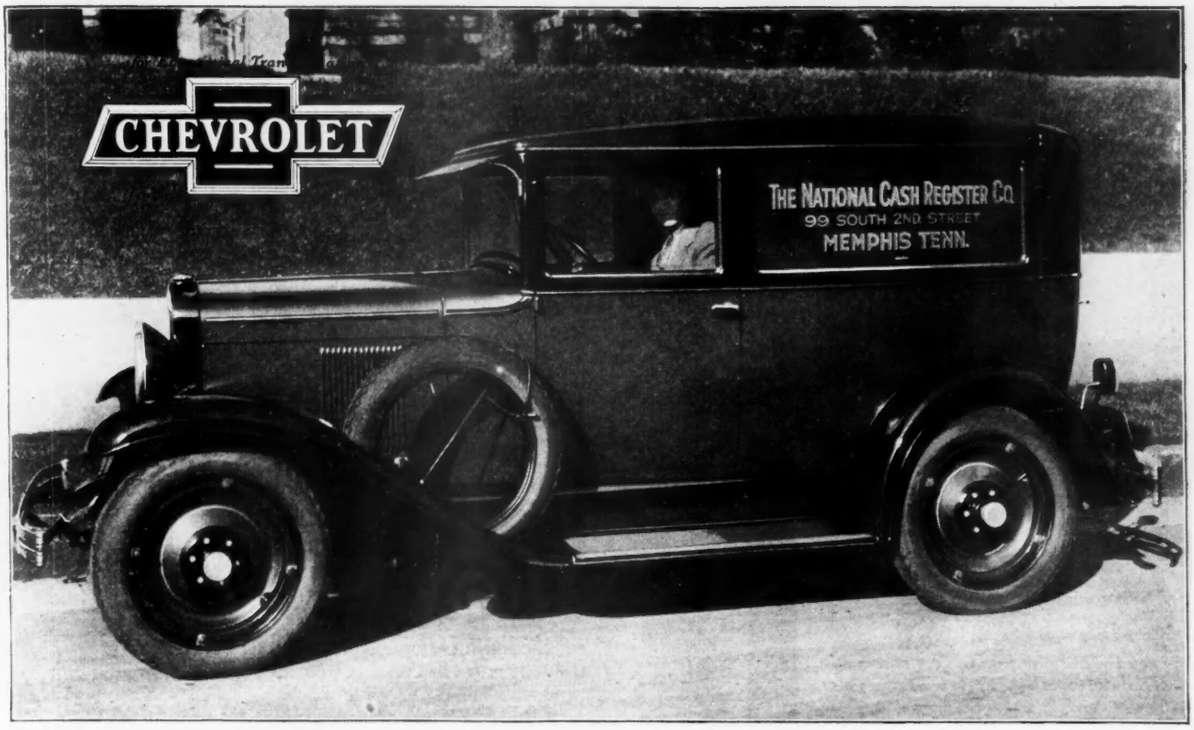
We don't mind saying that unless the members of The Iowa Truckers Association cast themselves in the role of detectives a number of the law's provisions will be ineffectual because of the unwillingness of public service commissioners to do a job of policing in addition to their other exacting work.

And we must claim that the law, far from being like a revolver placed in the hands of a homicidal maniac, as an esteemed commentator has put it, can be used as a means of protection against elements that delight in howling about the instability of motor freight transportation.

Etc.

Here's a tip to truck dealers: If you want to get a bunch of operators together, try attracting them with something vitally interesting, such as a discussion of "Economy in Truck Operation" or "Figuring Operating Costs." Truckers will doubtless corroborate the value of this suggestion, and so will Mueller Brothers, Relay distributor of Pittsburgh, Pa. This concern sent out mere postcard invitations to Pittsburgh operators, promised a brief discussion of truck operation economy, and 250 parked their bennies in the display room where the meeting was held. Economy is one of the chief grounds on which all operators—prosperous or struggling—find a common and absorbing interest.

We have made only a half-baked inquiry, the results of which, it follows, are semi-raw, but which nevertheless are digestible. And so they have nourished a conviction that combination passenger-car and truck dealers do not place enough emphasis in their advertising—including the display window—on their truck line. We found in our survey many cases where the word "truck" was completely omitted from the customary lettering on show windows. And it seems to us that of all the places where it should appear, the front of the combination dealer's store leads the parade with the flag. If a dealer requires a pair of binoculars to see the value of tying up directly and unmistakably with the growing field of truck transportation his business eyes no less require attention for a bad case of myopia.—G. T. H.



ALL THE ADVANTAGES OF SIX-CYLINDER PERFORMANCE

—*in the price range of the four!*

Powered by a great six-cylinder valve-in-head motor — whose smooth, powerful, economical operation has set a new standard for performance in the low-price field—the new six-cylinder Chevrolet trucks are sweeping on to the greatest popularity in the history of the commercial car industry.

Never before has a low-priced truck so admirably met the modern demands of business transportation. A power increase of 32% results in swifter acceleration and higher speed—with extraordinary flexibility in traffic. Big, quiet, non-locking four-wheel brakes give a measure of braking control in excess of the severest requirements. And a full ball bearing steering mechanism reduces driving fatigue to the very minimum.

But most remarkable of all—this amazing six-cylinder performance is actually available in *the price range and with the economy of the four!*

Consult your Chevrolet dealer today about your transportation requirements. You will find exactly the truck you need—and it will do your work with amazing efficiency and economy.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation

Sedan Delivery
$595
Light Delivery Chassis
$400
1½ Ton Chassis
$545
1½ Ton Chassis with Cab
$650

All prices f. o. b. factory Flint, Michigan

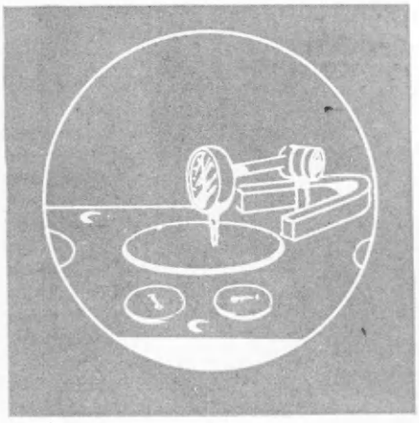
COMPARE the delivered price as well as the list price in considering automobile values. Chevrolet's delivered prices include only reasonable charges for delivery and financing.

A SIX IN THE PRICE RANGE OF THE FOUR!

SHOP CAN MATCH

Measuring Instruments Enable Repairmen to Effect Precision Maintenance

By James W. Cottrell



Valve and ignition timing depend upon accurate determination of top dead center

BECAUSE original factory-assembly measurements are made accurately maintenance men have an obligation to make measurements in the same way. There is no handicap upon their intentions to meet this obligation because instruments for this purpose have been developed to a high degree of efficiency and precision and the cost is quite moderate.

Many measurements made in connection with truck repair work are intended to show how much the thing being measured varies, if at all, from established standards. Clearance, end-play, out-of-roundness or off-size frequently are more important than actual size of parts. For illustration, in fitting a piston to a cylinder a mechanic measures clearance directly, not by comparing dimensions of piston and cylinder. Likewise, in checking a rear-axle ring-gear he finds out how much back-lash there is or the amount of wobble of the gear without making any direct measurement of the gear.

Much depends upon these measurements. During inspection of a vehicle a mechanic makes them to find out whether or not a job should be undertaken, and a lot of labor may be involved in his decision. If connecting rods, in an engine let go every once in awhile the trouble may be due to an out-of-round crankpin or to some fault in the oiling system. Measurement settles the question and the job order is written accordingly. While a job is in progress a mechanic rejects or replaces parts according to reading of measuring instruments and relies upon similar readings to insure proper fit of moving surfaces.

Measurements which are so important should be made accurately. Progressive maintenance men know the value of precision and that this ideal can be attained with little cost or trouble. And, unlike some other ideals, that of accuracy is within the reach of smaller shops, or even of individual mechanics who take pride in good workmanship.

A list of all the common repair operations which involve accurate measurement would be almost as long as a set of flat-rate operations. A few, chosen at random, may serve to remind shop men how often they must make close measurements in the course of ordinary work.

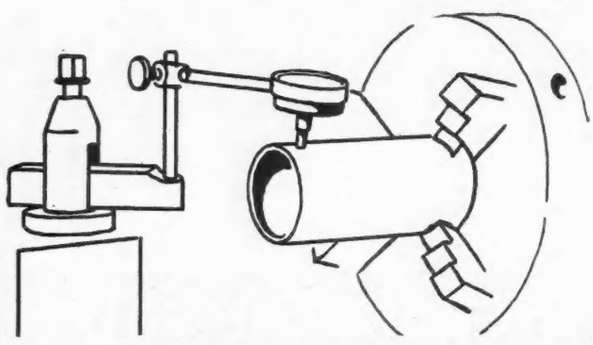
Fitting pistons to cylinders comes to mind first. Before starting the job a mechanic measures the cylinder walls for taper and out-of-round, using a dial gage. If the variation exceeds a certain standard he hones or grinds the cylinders and fits new pistons. With less departure from standard he may fit new pistons without machining the cylinders.

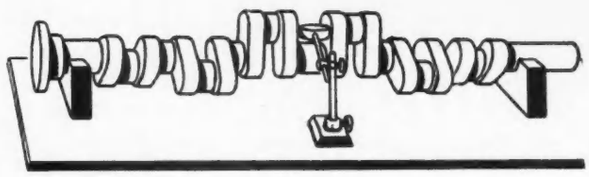
Clearance between piston and cylinder is fixed by manufacturer's recommendation. Long leaf feeler gages or strips of feeler stock are used for measuring clearance. There is a chance for difference in judgment among mechanics as to what is a tight and what a loose fit. Therefore a piston fitted "tight on .0035 in. feeler and loose on .003 in. feeler" may not be exactly as

Back-lash of pinion and ring gear and run-out of ring gear can be measured by two settings of a dial gage

Below left: Off-center or out-of-round may be checked during machine tool work

Below right: Crankshafts should be tested for out-of-roundness before replacing





FACTORY ACCURACY

Decoration by Edward Reed

the maker intended unless all concerned agree as to what "tight" means. To overcome this possibility, some makers specify the amount of pull required to remove a feeler strip placed between piston and cylinder. This pull is gaged by an ordinary spring scale.

Back-lash of pinion and ring gear and end-play of pinion and axle shafts are important measurements in rear-axle inspection and repair. End-play of the pinion shaft affects adjustment of ring gear and pinion. If there is too much play the pinion moves too far forward under load and the gears do not mesh properly. This same condition exists when there is excessive back-lash. Dial gages can be employed to advantage in making tests of end-play and back-lash. The gage is firmly supported on the housing and an attachment on the contact point extends to the gear tooth or the end of the shaft.

Another group of measurements which mechanics use to determine variation from normal, rather than size, is that which shows how much a part is out-of-true or off-center. These measurements are made during inspection before a job and also during progress of the work. Wobble in a ring gear can be checked easily by the same dial gage set-up as that used for back-lash measurement. A similar check reveals out-of-trueness of a flywheel, axle shaft or brake drum. Although different in many respects the job of finding out whether or not a cylinder bore is at right angles with the top of the block comes within this classification. This condition is determined by means of a bevel protractor with a V-edge blade. The protractor is set at 90 deg. and the blade extended into the cylinder bore straight up and down. If the bore is at right angles with the top of the block, the protractor will rest upon the block at each side of the bore. If the bore is

(Turn to page 46, please)

FLAT RATE PRICE LIST NUMBER 29

FORD MODEL A

Engine

1. Remove and replace engine. Does not include transfer of accessories $8.00
5. Inspect internal condition of engine. Includes: remove cylinder head, oil pan and connecting rod and piston assemblies, measure cylinder bores, pistons and crank pins and reassemble..... 6.85
6. Tune engine. Includes: clean and adjust breaker points and spark plugs, clean sediment bulb and carburetor screen, retime ignition, adjust carburetor and fan belt 2.50
8. Clean engine 1.50
9. Check engine compression, valve tappets, ignition system, fuel system, valve and ignition timing to locate engine miss..... 1.50

Cylinder Head and Oil Pan

10. Renew cylinder head gasket..... $1.50
13. Remove oil pan, clean and replace 2.25
14. Scrape carbon, all cylinders..... 2.25

Piston Pins and Rings

1. Rings, renew all, align and adjust connecting rods.....$10.75
2. Rings, renew all, after connect-rods are out..... 1.60
3. Rings, renew all, and align rods 8.25
4. Standard pins and bushings, renew all, align and adjust rods.. 13.15
5. Piston pins, renew all and align rods only 9.85
6. Rings and pins, renew all and align rods only..... 11.45
7. Renew one piston pin, when rod is out 1.00
8. Piston pins, renew all, align and adjust rods 12.35
9. Piston pins, renew all when rods are out 3.20
10. Rings and pins, renew all, align and adjust rods..... 13.95

Piston Assemblies

11. Piston, pin and ring assembly, renew one when connecting rod is out and cylinder head is off.. $3.60
12. Hone or bore one cylinder, adjust and align rod and renew one oversize piston pin and ring assembly, when connecting rod is out and cylinder head is off..... 5.95
13. Hone or bore all cylinders, align and adjust rods and renew oversize piston pin and ring assemblies, when connecting rods are out and cylinder head is off.... 20.70
14. Hone or bore all cylinders, renew all oversize piston, pin and ring assemblies, align and adjust connecting rods 25.95

Rod Bearings

1. Remove and replace connecting rod and piston assemblies. Includes removal of oil pan and cylinder head and replacing parts, not other work included..... $5.25
2. Align all connecting rods, when rods are out..... 1.40
3. Connecting rod bearings, adjust all, when pan is off. Includes removing shims but does not include scraping 3.50
4. Connecting rod bearings, adjust all. Includes operation 3..... 5.75
5. Connecting rod bearing, renew and align one and adjust others. 8.60
5a. Renew and align each additional rod bearing 2.25
6. Renew all connecting rod bearings and align all connecting rods, when rods are out..... 8.20
7. Refit only, one connecting rod bearing, when oil pan is off. Includes adjustment plus reaming or scraping to get good fit. Includes removal and replacement of cylinder head. Does not include alignment of rod..... 2.25
8. Refit only, one connecting rod bearing when rod is out. Does not include alignment of rod.... 1.80

Main and Connecting Rod Bearings

1. Main bearings adjust all when pan is off..... $2.75
2. Main and connecting rod bearings, adjust all, includes operation 1 ..... 8.50
3. Main and connecting rod bearings, adjust all, when oil pan is off 6.25

Valves and Tappets

1. Clean carbon, grind valves and tune engine. Includes: refacing valves and seats, cleaning and adjusting breaker points and spark plugs, cleaning sediment bulb and carburetor screen, adjusting fan belt and retiming ignition. Includes installing new valve guides if necessary..... $8.50
1a. Grind and reface valves and seats. Clean carbon and tune engine, as in operation 1, when cylinder head is off..... 6.25
2. Clean carbon, grind and reface valves and seats and set tappet clearance. Does not include tuning engine 6.00
3. Renew stem guides in connection with operation 1 ..... N.C.
4. Renew stem guide, in connection with operation 1 ..... N.C.
11. Valve cover plate gaskets, renew all 0.75

Timing Gears

1. Timing case cover, remove, clean and replace, including removing and replacing radiator $3.00
3. Retime valves 6.00
4. Replace cam gear 4.00
6. Renew cam gear after front cover is off 1.00

Camshaft

7. Remove and replace camshaft, includes removing and replacing radiator and timing case cover.. $6.00
7a. Remove and replace camshaft when timing case cover is off... 3.00

Units Brought in for Repairs

1. Overhaul engine, including reboring cylinders and rebabbitting bearings $18.50
2. Rebore cylinders only 3.50
3. Rebore cylinders and fit new pistons 4.50
4. Rebore and rebabbitt cylinder block and fit new pistons..... 7.50
5. Rebabbitt cylinder block 3.50
6. Rebabbitt cylinder block and fit crankshaft 5.50
7. Rebabbitt cylinder block, fit new pistons, crankshaft and connecting rods 8.00
8. Rebore and rebabbitt cylinder block and fit new pistons, crankshaft and connecting rods 10.00
9. Rebore and rebabbitt cylinder block, fit pistons, valves, push rods, camshaft, crankshaft, connecting rods 12.00
10. Rebore cylinders and fit new pistons and valves 5.50
11. Rebore cylinders and fit pistons, valves, push rods and straighten and fit camshaft 7.50
12. Fit pistons and crankshaft in rebored block 3.25

NOTE

Prices for Ford Model A engine operations are based upon operations given in Rapid Flat Rate and Repair Data Book, published by Chilton Class Journal Company. These operations are not the same as those included in the Ford Repair Schedule. Wherever possible the basic prices are based upon figures in the Ford Repair Schedule.

Prices for units brought to the shop are taken from the Ford Repair Schedule.

Connecting rod operations and other operations involving removal of the connecting rods do not include alignment of connecting rods, unless so stated in the operation.

Additional Ford Model A prices will be given in later issues.

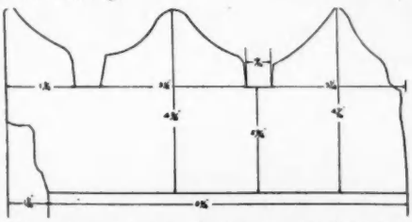
SERVICE HINTS

From Shop and Factory

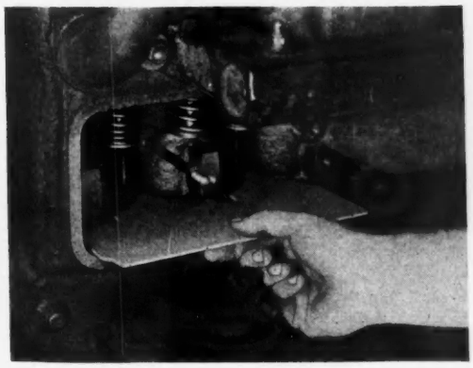
Valve Guard Plate

Any mechanic who has ever dropped a valve lock down into a crankcase will be interested in the design of a valve guard plate suggested by the Studebaker Corp. for use on its eight-cylinder bus engine. The factory states "the plate not only insures against the valve keepers falling into the oil pan but also provides an ideal support for the valve lifting tool."

Method of using the plate is shown in the photo and dimensions for a plate for the Studebaker engine is shown in the drawing.



Dimensions for guard plate for Studebaker



Placing the guard in place for valve job

Salvaging a Cylinder Block

A cylinder block which was badly damaged by a loose piston pin was salvaged in the New York City Central Motor Repair Shop by fitting sleeves to two bores. When the block was examined it was found that No. 2 bore was deeply scored by the pin. Piston in No. 3 bore was broken in pieces and the thrashing piston pin still in the connecting rod had broken four long holes in the cylinder.

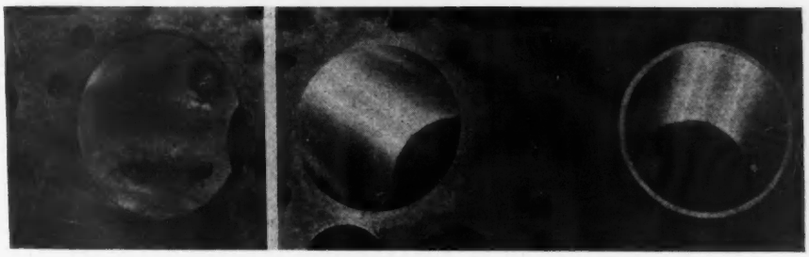
First step in the repair was to weld the holes to prevent leakage of water. Then the two cylinders were bored to two different diameters, 4.500 in. in lower half of hole and 4.515 in. in upper half of hole. Standard size of cylinder bore is 4.250 in.

The sleeve was turned to size and was finished .005 in. larger than the hole by grinding in two steps 4.520 in. in upper half and 4.505 in. for the lower part. The block was heated to about 250 deg. and the sleeves pressed into place, a cement of litharge and glycerine being used to seal them. The interior of the sleeves was then ground to standard size of 4.250 in. Cost of the job was half that of a new block.

Photographs and information concerning this repair job were furnished by courtesy of Albert Goldman, Commissioner, Department of Plant and Structures, New York City.

Gaskets in Sets

A stock clerk made a hit with the shop force by putting gaskets for certain jobs in sets and issuing them as units. Whenever possible the gaskets are put in envelopes but if there are one or two very large gaskets, as in the case of carbon and valve jobs, the large gaskets are not wrapped but are tied to the envelope containing small gaskets. This plan takes but a little time but it saves much time for mechanics who otherwise would be obliged to wait while sets of gaskets are made up and, still more important, charged to the job.



Left: Two long vertical gouges in the cylinder wall, and two others opposite apparently ruined this cylinder block. Right: Two sleeves inserted after the cylinders had been bored restored the cylinders to standard size and usefulness

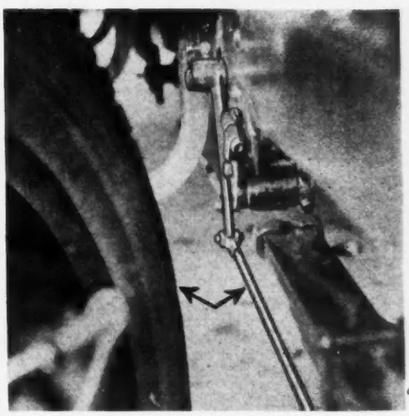
Skipping Front Brakes

What has steering wheel lock to do with brakes?

A front wheel brake which alternately locked and unlocked when turning to the right gave one service man a bit of trouble. The locking and unlocking took place without applying the brakes and the action was so severe that the right front wheel skipped around a sharp right turn.

The whole brake system was checked over with no success and the service man looked for some outside cause. The fact that oversize tires had been installed a short time before gave him a clue.

At full lock to the right the projections on the non-skid tread of the tire touched the brake pull rod and pulled on the brake and as the wheel turned further the rod was dropped and then picked up again. Adjustment of the steering wheel stops cured the trouble.



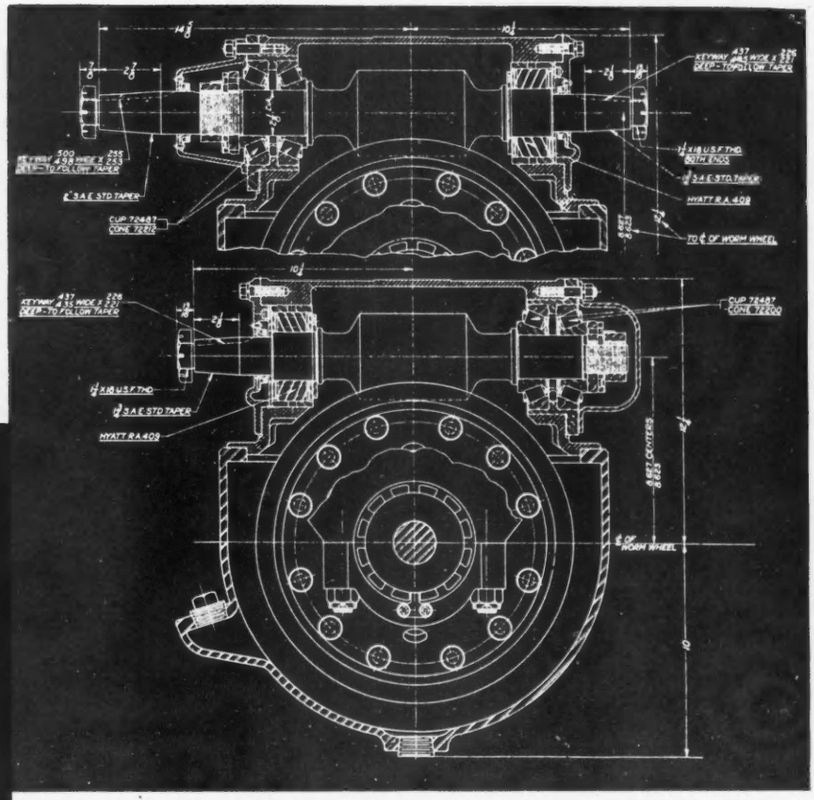
Check space between tire and brake pull-rod with wheel turned all the way to right or left

TIMKEN ACHIEVES

DEVELOPMENT has been completed and introduction is announced of a tandem axle four-wheel drive unit for six-wheel vehicles by the Timken-Detroit Axle Co. While the individual axles in themselves follow closely basic Timken design, the unit in itself represents an entirely new development. It is intended for original equipment primarily, but an analysis of the design of the unit, a self-contained entity, makes it evident that it can without difficulty be used for replacement on single driving axle trucks now in operation.

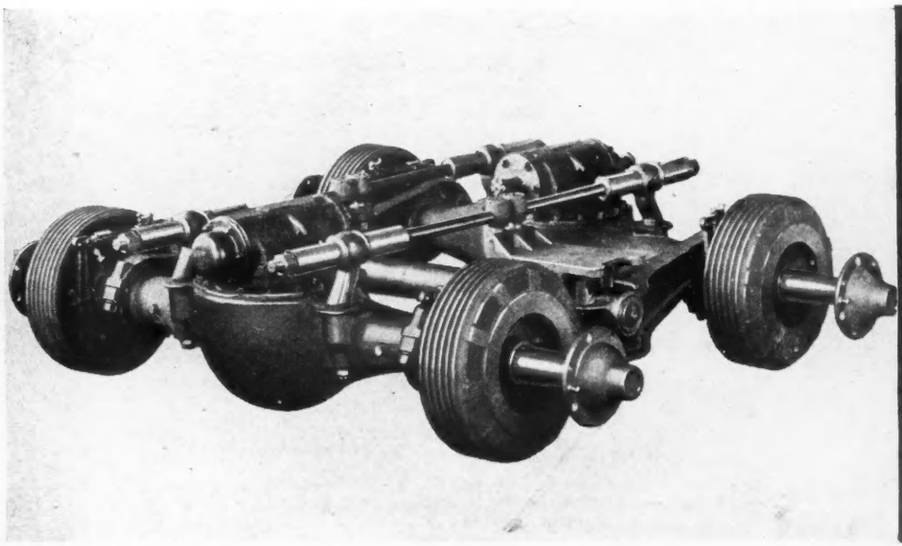
This self-contained unit can be mounted directly on semi-elliptic springs without change of frame or spring design. This can either be the sole connection, or, if desired, radius rods can be fitted.

Two axles are connected by two load-equalizing beams. The beams have spherical trunnion bearings on the ends and a trunnion mounting at the center for the spring pads. A large trunnion tube cross-wise to the assembly connects the two beams. The spring pads have a double bearing on this tube. This construction stabilizes the springs and prevents axles skewing. There is a torque arm extending upward from a boss on each axle housing. The arms on each side are connected by two torque rods, which are pinned to the spring pads at the other ends. This assembly makes up one-half of the torque couple and the other half comprises the load-equalizing beams and axle housings.



Above: Sections of the forward (top) and rear (bottom) axles. Spacing between worm shaft bearings is kept to a minimum by special design of oil seal. Double ended worm for rear axle can be furnished

Below: Complete Timken tandem drive axle unit equipped with Westinghouse air brakes. A feature of the unit aiding in installation in different types of trucks is the wide spring pad, capable of taking several spring widths. Universal joints between worms are not furnished, being at the option of the purchaser



To take care of rotational speed differentials between front and rear axles, the axle mounting has been made flexible by incorporating springs in the torque rods. The torque rod itself passes through a ball forming the end of the axle torque lever. Ball followers are provided on either side, with springs between the followers and collars or nuts on the torque rod. The design permits a travel of about 1½ in. according to tests.

In designing the worm-drive "SW" units, of

TANDEM DRIVE

New Self-Contained Four-Wheel Drive Unit Can Be Used for Replacement on Single Drive Axle Trucks

By Athel F. Denham

which there are four, certain basic differences from standard axle design practice had to be kept in mind. The forward unit of the tandem axle has a double ended worm, while the rear unit has a single ended worm, but in case interchangeability is desired a double ended unit can be supplied. To keep the distance between the axle center and the driving taper as short as possible to reduce the angularity of the interconnecting propeller shaft, the spacing between the worm shaft bearings has been kept to a minimum by the design of the oil seal. Since the taper at the forward end of the front axle transmits more drive it is larger than the taper in the rear unit.

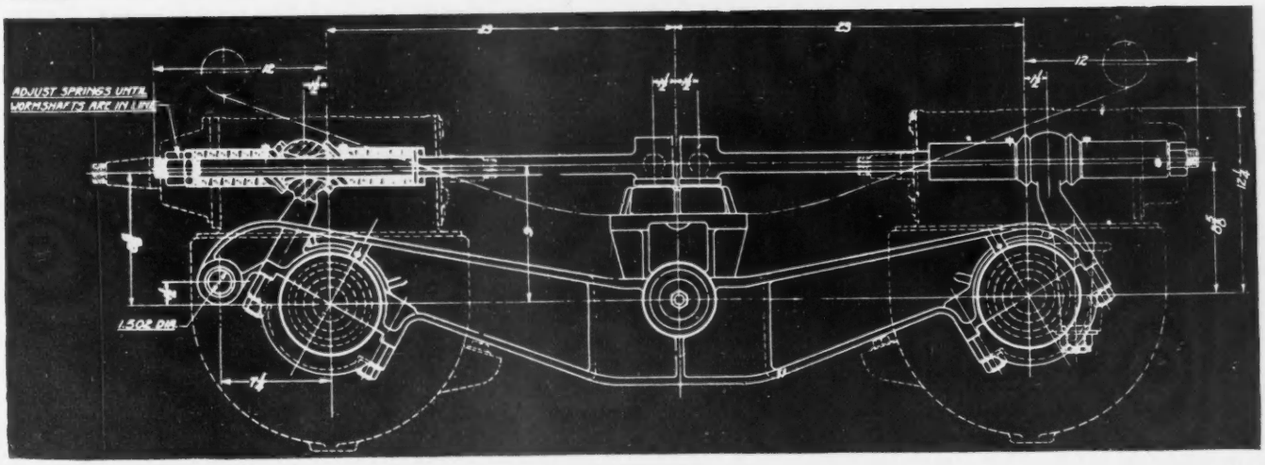
Replaceable bronze liners are used at all major bearing points. Lubrication of these bearings is through a drilled hole to an oil groove in the center of the bearing. The four bearings of the trunnion tube are lubricated from a reservoir formed in the tube by a plug at the outer end and a baffle just

(Turn to page 60, please)

AXLES

Type No.	SW 100	SW 200	SW 300	SW 400
Weight, pneumatics..	16,000	22,000	28,000	32,000
Weight, solids.	15,000	21,000	26,000	30,000
Brakes	Lockheed Hydraulic or Westinghouse Air			
Brake size....	16x3½ in.	17¼ x 4 in.	17¼x4 in.	17¼ x 4 in.
Spring centers.	39-41-43	41¼-43¾-45¼	42-44-46	42-44-46
Forward axle No. ...	63796	65094	65794	66798
Rear axle No.	63795	65093	65793	66797
Axle spacing..	46 in.	46 in.	46 in.	46 in.
Frame width..	32-34-36	34-36-38 in.	34-36-38 in.	34-36-38 in.
Spring width..	3-4 in.	3-4 in.	4-5 in.	4-5 in.
Overall of axle	81¼ in.	88-3/16 in.	86⅝ in.	96 in.
Track	71 in.	75-13/16 in.	75 in.	75 in.
Dual wheel spacing	9¾ in.	10½ in.	11¼ in.	11¼ in.

Views of the load equalizing beam. Both views show the spherical ends for trunnion mounting to the axles and two-bearing center, which receives the trunnion tube and spring pad. Note the journal at the forward end to provide for radius rod installation in case springs are double shackled. The line drawing also shows the mounting of the torque rods



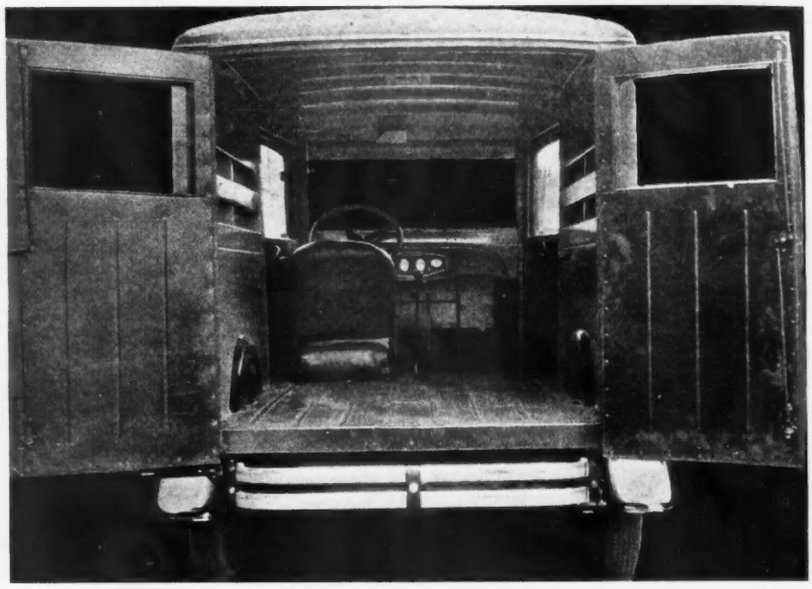
DODGE ½-TON EXPRESS PRICED AT $545

Is Lowest Priced Commercial Vehicle Ever Offered by Dodge

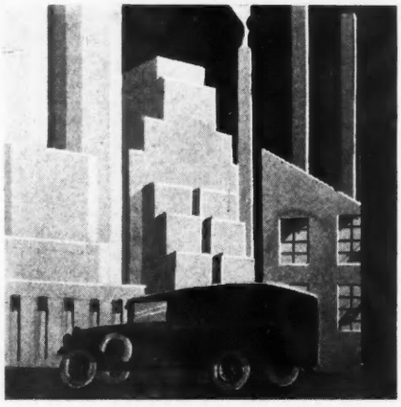
A NEW lower priced ½-ton Merchants Express is announced by Dodge Brothers Corp. With its price of $545 it is the lowest priced chassis ever offered by the Dodge organization for commercial use. Featuring the new model is an attractive and roomy panel body listed complete at $795, but the chassis is available with or without the body.

Of the mechanical units the 4-cylinder, 3⅝ x 4¼-in. engine with a displacement of 175.4 cu. in. develops 45 hp. at 2800 r.p.m. A final reduction of 4.7 to 1 gives an engine speed of 1650 r.p.m. at 30 m.p.h. Compression ratio is 4.6 to 1. Air cleaner, oil filter and crankcase ventilator are standard.

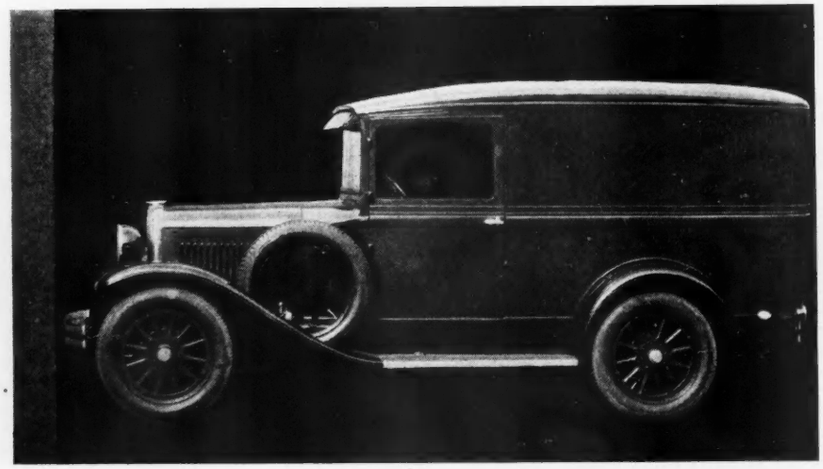
A standard three-speed transmission, single-plate clutch, 2-in. propeller shaft with metal universals and semi-floating, bevel gear rear axle comprise the driving mechanism. Four-wheel internal hydraulic brakes supplemented by an independent hand brake on the propeller shaft comprise the braking system. Additional details are furnished in the accompanying table.



Rear view showing interior body work. Note door lining, inside side panels and structure above, wheelhousing, floor, dome light and instrument panel



Dodge Brothers' new Merchant Express listing at $795 without bumpers or spare tire. Exterior is finished in blue with cream wheels and black hubs and fenders. Inside dimensions: Length, 72 in.; width, 45½ in., and height, 50 in. Chassis alone lists at $545



Specifications Dodge ½-Ton

Capacity	½ ton
Price, chassis	$545
Panel body	$795
Wheelbase	109 in.
Chassis Weight	1900 lb.
Body Allowance	950 lb.
Tires	4.75/20
Engine, size	4-3⅝ x 4¼ in.
Type	L-head
Displacement	175.4 cu. in.
Hp. @ 2800 r.p.m.	45
Number of main bearings	3
Diameter of main bearings	2¼ in.
Piston material	Aluminum alloy
Electrical Units	Delco-Remy
Ignition	semi-automatic
Starter	Bendix
Generator drive	V-belt
Carburetor	plain tube
Feed	vacuum
Gas tank	11 gal.
Clutch	8⅞ in. plate
Transmission	3 speed
Universals	2-metal
Rear Axle type	semi-floating
final drive	bevel
ratio	4.7 to 1
tread	56 in.
Service Brakes	four wheel internal hydraulic
size of drums	7 x 2 in.
Hand Brake	external
location	transmission
size of drum	7 x 2 in.
Wheels	20-in. wood
Steering gear	worm and sector
Spring, front	35½ x 1¾ in.
rear	53½ x 1¾ in.
Drive type	Hotchkiss
Frame	5 x 1¾x9/64 in.
Overall length	169 in.

RELAY PUTS ITS AXLE IN LIGHT MODELS

New 1 and 1½-Ton Chassis Incorporate 6-Cylinder Engines, 4-Speed Transmissions, and 4-Wheel Brakes

One of the two new light Relays, which incorporate the Relay axle, recently announced

RELAY MOTORS CORP., Lima, Ohio, recently enlarged its line with the introduction of 1 and 1½-ton models, known as Models 20B and S11B, which incorporate the Relay axle. This is the first time the Relay rear axle has been used under trucks of these capacities. Equipped with six-cylinder engines, four-speed transmissions, and four-wheel internal brakes hydraulically operated, both models are similar differing only in frame size, rear axle ratios, number of leaves in springs, number of tires and in wheelbase. Comparative specification details are furnished in the accompanying table.

Model 20B, it will be noticed, is available in standard wheelbase of 142 in. with body allowance of 1000 lb. and a chassis weight of 4100 lb., while Model S11B is offered in two wheelbase lengths, namely 162-in. standard and 142-in. short with body allowance of 1500 lb. and chassis weight of 4500 lb.

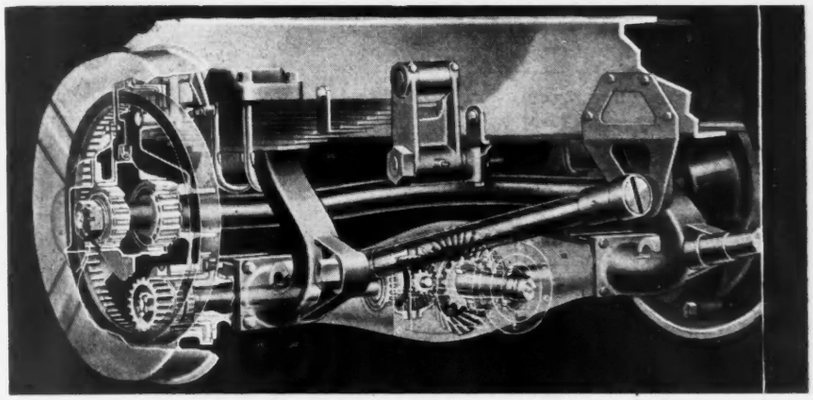
The rear axle ratio of the lighter model is 5 to 1, while that of the 1½ ton model is 6 to 1. Spring sizes are the same for both models except that the rear springs of S11B have an extra leaf.

The Relay axle, it will be recalled, has a spiral bevel differential at the center with internal gears and pinions in the wheels, which transmit power to the wheels. While the accompanying phantom view of the axle is of another model, except for a few changes in physical appearance the principle is the same. The wheels are supported on two roller bearings on a dead axle. All weight is supported by a large member attached to the outer ends of the live axle housing and to the springs, the upper end of the member being attached to the springs. Drive is taken through radius rods which connect the before-mentioned members to the frame.

Phantom showing construction and assembly of the Relay drive axle

Specifications RELAY Models 20B and S11B

Model	20B	S11B
Tonnage rating	1 ton	1½ ton
Wheelbase, standard	142 in.	162 in.
optional		142 in.
Weight chassis	4100 lb.	4500 lb.
Engine, make	Buda-6	Buda-6
size	3⅛x4½ in.	3¾x4½ in.
displacement	241.6 cu. in.	241.6 cu. in.
Carburetor, make	Zenith	Zenith
feed	vacuum	vacuum
Gasoline tank,	under seat	under seat
capacity	20 gal.	20 gal.
Ignition, make	Auto-Lite	Auto-Lite
type	battery	battery
Generator, make	Auto-Lite	Auto-Lite
Starter, make	Auto-Lite	Auto-Lite
Radiator, make	Long	Long
type	fin & tube	fin & tube
Clutch, make	Brown-Lipe	Brown-Lipe
type	single plate	single-plate
Transmission, make	Brown-Lipe	Brown-Lipe
speeds	4	4
mounted	unit	unit
Universals, make	Blood-Bros.	Blood-Bros.
Rear Axle, make	Relay	Relay
ratio standard	5 to 1	6 to 1
Torque	springs	springs
Drive	radius rods	radius rods
Steering Gear, make	Hannum	Hannum
Service Brake	4-wheel internal hydraulic	4-wheel internal hydraulic
size front	16x2¼ in.	16x2¼ in.
size rear	16¼x2½ in.	16¼x2½ in.
Hand Brake		
size	8¼x2 in.	8¼x2 in.
location	p.-shaft	p.-shaft
operation	external	external
Springs, size, number leaves		
front	2¼x36 in.—10	2¼x36 in—10
rear	2½ x48 in.—9	2½x48 in.—11
Tires, front	30x5 in.	30x5 in.
rear	30x5 in. single	30x5 in. dual
Frame Width, rear	34 in.	34 in.
Overall length of chassis	211 in.	241 in.
Length dash to center of rear axle	111½ in.	131½ in.
Length dash to end of frame	152 in.	182 in.
Chassis Lubrication.	Alemite	Alemite



NEW RUGBY 4 HAS

One-Tonner, Super Furnishes Six Speeds With Three-Speed mission and Bendix Wheel

Specifications Rugby Model 401

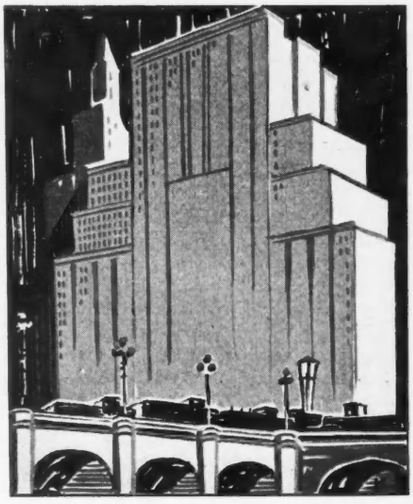
Model (designation)	401
Chassis price, list	$775
Capacity, tonnage rating	1 ton
Body weight allowance	1000 lb.
Chassis weight	2350 lb.
Wheelbase, standard	132 in.
Tires, standard	30x5 in.
Engine, number of cylinders and size	4 3-⅜x4¼ in.
Compression ratio	4.75 to 1
Carburetor, make	Tillitson
feed	vacuum
make of fuel feed system	Stewart
Gasoline tank, location	under seat
capacity, gal.	10 gal.
Radiator, type	cellular
capacity	9 qt.
Transmission, where mounted	amidships
number speeds	3
Universals, make	Spicer
type	metal 3, rubber ball 1
Power Transmission	drive and propeller shafts
Rear axle	2 speed
first speed ratio	6.1 to 1
second speed ratio	9.25 to 1
final drive	spiral bevel
type	semi-floating
Steering gear, type	worm and sector
Service brake	Bendix, two-shoe
type	internal
size of drum, front	13x1¼ in.
size of drum, rear	14x2 in.
Springs, front, length and width	36x1¾ in.
rear	45x2½ in.
Frame	pressed steel channel
depth, width, thickness	5½x2¼x3/16 in.
Wheels	cast steel
Chassis lubrication, make	Alemite
Lnegth, dash axle center	103 in.
Length, dash to end of frame	140½ in.
Frame width	32 in.
Turning radius	23 ft.

A NEW 1-ton Rugby, Model 401, furnishing six speeds forward by means of three-speed amidships mounted transmission and a two-speed rear axle, has been announced by Durant Motors, Inc. This four-cylinder unit, listing at $775, supersedes the former Durant 1-ton Model "X."

The rear axle is a semi-floating spiral bevel gear unit to the front of which is bolted a two-speed gear. Reduction in the auxiliary is through a constant mesh internal gear which provides a direct drive and a reduction of 1.5 to 1. Together with the bevel gear reduction of 6.1 to 1, the transmission ratios have total range of 6.1 to 1 in complete direct to 30.7 to 1 in low low. The pinion shaft is straddle-mounted on ball bearings and the differential and axle shafts rotate on Timken taper rollers.

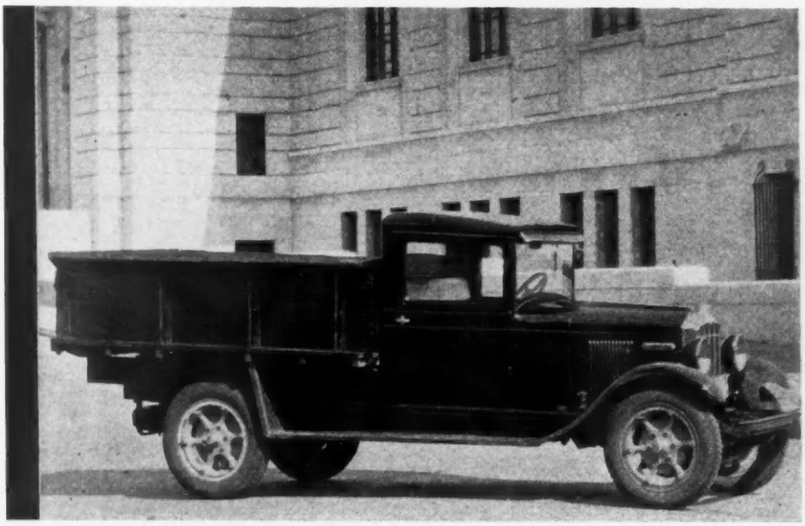
The two-speed reduction unit is lubricated from the rear axle. Oil collected from the ring gear by a trough built into the main axle housing is delivered through a large diameter cored hole in the two-speed reduction housing to the forward end of the two-speed unit. The oil drains back into the differential case by gravity.

Possibilities of accidental engagement or disengagement of the unit has been overcome by providing a spring control at the rear end of the shift rod. This spring is so designed that initial movement of the shift lever does not result in any movement of the shifter fork, until the proper spring pressure has been built up, thus preventing the inertia of the long shift rod and shift



TWO-SPEED AXLE

seding Model X, and is Equipped Amidships Trans- Two-Shoe Four- Brakes



Above: New Rugby Model 401 four-cylinder one-ton chassis. Note front bumper, which is an extension of the frame, and spare tire carrier

lever from throwing the gear out of engagement when a hole is struck and the brakes are applied at the same time.

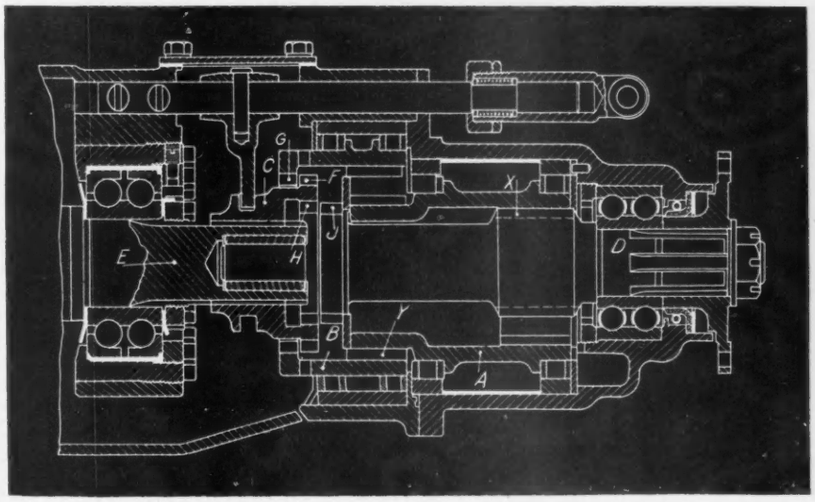
The powerplant remains basically unchanged, but the adoption of high compression (4.75 to 1) and a larger carburetor provide a 10 per cent increase in torque according to the factory. Interchangeable type main bearings are employed on the new model.

Mounted amidships, as formerly, the three-speed transmission has a ball bearing main shaft and is driven through a Spicer metal and rubber ball universal joint. The clutch corresponds with the Model X unit.

Bendix two-shoe four-wheel brakes with molded lining have been adopted. All four brakes are operated by either foot or hand, a single cross-shaft being provided on domestic and double cross-shaft on export models.

The front axle in Model 401 is heavier than in Model X and king pins are ⅛ in. larger with larger bushings. Springs are semi-elliptic. The pressed steel frame reinforced by five gusseted channel type cross-members is tapered at the front, but is straight from the dash back. A pressed steel front bumper is carried on an extension of the frame.

The new Rugby provides six forward speeds and lists at $775. Front axle is heavier than that used in the former Rugby Model X. The oval sections at the wheel ends provide for brake torque reaction



Below: Section of two-speed unit, which is mounted on front of rear axle. Sleeve A has internal teeth, which are in constant mesh at X with external teeth on gear splined to drive shaft D, and external teeth, which are in constant mesh at Y with internal teeth on sleeve B. The drive shaft is mounted on roller bearings with a double row ball bearing at the front. Sleeve C, which is attached to the pinion shaft E by splines, has internal clutch teeth H and external clutch teeth F, which engage either with clutch teeth J or clutch teeth F, respectively. Direct transmission of power is obtained by engaging clutch teeth H with clutch teeth J, which connects drive shaft and pinion shaft. Reduction is obtained by shifting external clutch teeth F to engage with clutch teeth G, whereupon power is transmitted from drive shaft through internal gearing X to sleeve A, through internal gearing Y to sleeve B, through GF to shifting sleeve C to pinion shaft E

OPERATING COSTS

(Continued from page 31)

central district Inter-City and Long Distance Removal Committee.

Averages are given for gasoline, oil, tires and maintenance for each of the groups reported, and total of these items. Annual mileage per year and miles per gallon also are averaged for each group. The averages given on the lines with totals show the average for one year of operation of all trucks in the tonnage classification.

Before drawing conclusions from the figures here presented due consideration should be given those variables which enter into all costs. For illustration, the 2-ton trucks show an average gasoline mileage of 2.08 while the figure for 2½-ton trucks is more than twice as much, 5.32 m.p.g. Some explanation is in order, and we find it in the fact that the 2-ton trucks ran 3224 miles per year and the 2½-tonners made 9475 miles per year. The logical assumption is that the 2-ton units made many more stops per day than the 2½-ton trucks, and consequently ran less miles per gallon.

The van figures cover operation of a six-cylinder White van from April 1, 1928, to December 31, 1928, during which time it traveled 22,936 miles. The Mack is a four-cylinder van which ran 22,513 miles during the year 1928.

Original cost of the White van, including all extras and moving equipment was $10,113.60 and depreciation is figured on an 8-year basis. Tires are 36 by 8 in. pneumatics with duals on rear wheels. The Mack van cost $10,299.84 and it also is depreciated over eight years. Tires are 34 by 7 in. pneumatics with dual rears. Included in the cost of operating this unit is change-over to another type wheels and installing a B-K booster brake. Some fleet operators would capitalize this and charge it over a term of years, others prefer to charge to one year's costs, as has been done in this case. Interest is charged at 6 per cent; insurance includes public liability, property damage and collision; taxes include licenses, personal property tax and franchise tax; overhead is estimated at $3 for each day of operation.

Cost of Operation and Revenue of Two Vans

	White	Mack
Operating costs:		
Gasoline	$662.61	$474.94
Oil	57.01	48.36
Tires	222.79	289.89
Repairs to body	12.90	32.16
Repairs to chassis	74.63	186.07
Washing	88.00	96.00
Total	$1,117.94	$1,127.42
Wheel change-over		$388.69
Labor	$3,496.51	$3,947.17
Travel expense	391.28	285.80
Total	$3,887.79	$4,232.97
Fixed charges:		
Depreciation	$948.15	$1,287.48
Interest	455.13	618.00
Insurance	137.61	125.88
Garage rent	225.00	255.00
Taxes	85.50	114.00
Overhead	549.00	669.00
Total fixed charges	$2,400.39	$3,069.36
Grand total, operating, labor and fixed charges	$7,406.12	$8,818.44
Miles per gal. gas	5.9	7.1
Miles per gal. oil	261	297
Cost of operation per mi.	$0.32	$0.39
Income per mi.	0.48	0.55

THREE UTILITIES

(Continued from page 17)

nies include all normal fixed and operating charges, including depreciation, overhead, maintenance, gasoline, oil, tires and licenses.

Under these conditions a favorable showing by the fleet company depends upon the ability of the management to control upkeep costs, of which maintenance obviously is a major item.

Maintenance setup comprises personnel and facilities for inspection, adjustments and running repairs at each of seven garages, which are situated for convenience of operating companies, and overhauls at a base shop.

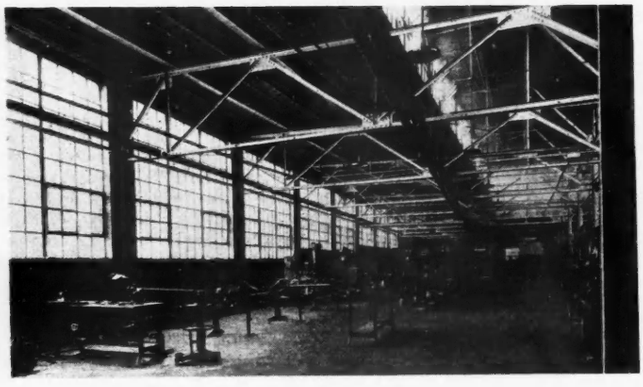
Vehicles are inspected every month, always on the same day of the month. Inspections include minor repairs and adjustments which can be performed in the garage, such as carbon and valve jobs, brake adjusting, etc. Ninety per cent of these inspections are made at night.

In addition to periodic inspection mechanics stationed at garages make additional repairs as called for by driver's reports. When a driver returns to a garage with a vehicle he is obliged to answer each of 13 questions on a report form, reproduced herewith. If any item is not okay mechanics inspect the vehicle at once and make repairs before the vehicle is scheduled out again.

Framed charts giving standards for such items as stopping distance and cylinder compression are provided for the guidance of the inspectors and mechanics. The cylinder compression chart shows standard compression at hand cranking speed for trucks not equipped with starters and at starter speed for trucks so equipped. Another chart gives oil pressure in accordance with manufacturers recommendations and still another denotes proper setting of engine governors on four models of trucks.

The charts are drawn by hand and figures are written, in most cases, by typewriter. Frames are made of flat picture moulding, painted black and the paper is mounted on cards behind glass.

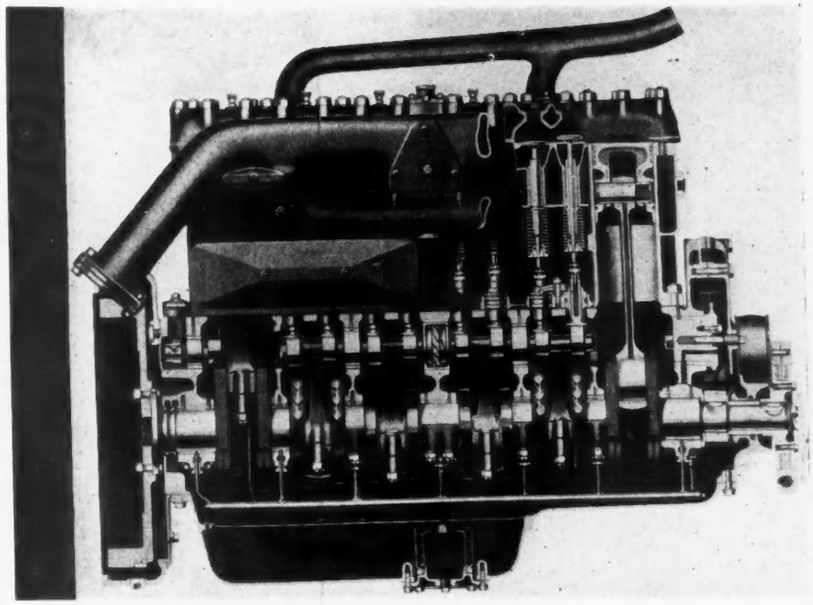
The base shop which was built about two years ago contains facilities for complete overhaul of vehicles. In designing the shop company officials considered the function of the establishment as a whole and then each of the departments separately and in relation to each other. The resulting layout and schedule of shop equipment is shown in the accompanying illustration and the drawing and caption on page 17. The shop has a frontage of 158 ft. and depth of 420 ft. The motor coach company garage adjoins on one side and a space 50 by 140 ft. within the area of the base shop is partitioned off and used by the coach company.



Work benches and unit stands are placed so that mechanics can work on all sides. The stockroom is in the center of the floor with work space on either side, as shown in drawing

CONTINENTAL BUILDS LARGER H ENGINE

Model 16H Developing 127 Hp. Compared With 105 for 15H Has Larger Bore and Higher Compression



Above: Continental 16H engine, has six cylinders 4¾ by 5¾, piston displacement of 611 cu. in. and develops 127 hp. Two cylinder heads are employed instead of one, as used on the 15H. A vibration damper is fitted to the front of the seven-bearing crankshaft

Below: Comparative charts showing increased power of 16H Continental over its predecessor 15H. The new engine has a larger bore, higher compression ratio and changes in the camshaft and ignition systems

A FURTHER development of its H series engine for bus and van service is announced by Continental Motors Corp. The 16H, while fundamentally unchanged over its predecessor 15H, has been increased considerably in power. This has been effected by three means, the bore has been increased from 4½ in. to 4¾ in., resulting in a piston displacement of 611.34 cu. in., and N.A.C.C. rating of 54.15 hp., as compared with 548.70, and 48.6 formerly; the compression ratio has been raised from 4.16 to 4.54 to 1, and the power curve has been entirely revised by changes in the camshaft and ignition systems. As a result power peak is 2350 r.p.m. as compared with 2000 r.p.m. formerly.

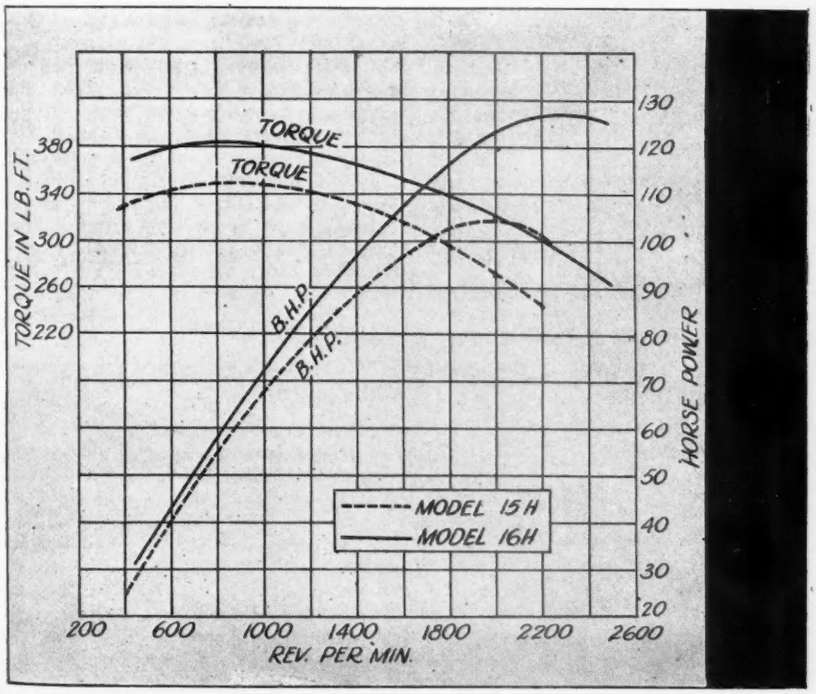
In actual maximum horsepower, average figures compiled by Continental Motors show a peak of 127 hp. for the 16H as compared with 105 for the 15H. Moreover, the power developed by the latest edition at its predecessor's peak speed is some 18 hp. higher.

The increased peaking speed is considered desirable due to the steady increase in bus road speeds, and the desirability of not reducing gear ratios materially.

From the service angle, there has been an improvement in the 16H in the provision of a split cylinder head, one for the front and for the rear bank of three cylinders each, providing better accessibility. This, of course, involved a change in the water outlet, and in place of a single riser, two outlets are provided, one in each head half. This change should also assist in maintaining more uniform block temperatures. The built-in thermostat of the 15H has been dropped.

Another change is in the optional fuel pump drive provision. On the 15H, worm gearing from the oil pump drive shaft was provided to drive a gear or similar type pump at 1/12 crankshaft speed. With the development of diaphragm types of fuel pumps, a cam has been provided on the oil pump drive shaft, on which a finger from an AC or other type fuel pump rides vertically. The fuel pump equipment, however, remains optional.

Weight of the engine is found to be slightly higher at 1490 lb. as compared with 1463 lb. formerly, but shipping weights due to new packing methods have been materially decreased. For export, for instance, crated weight is 2030 lb. as against 2130 lb. formerly.

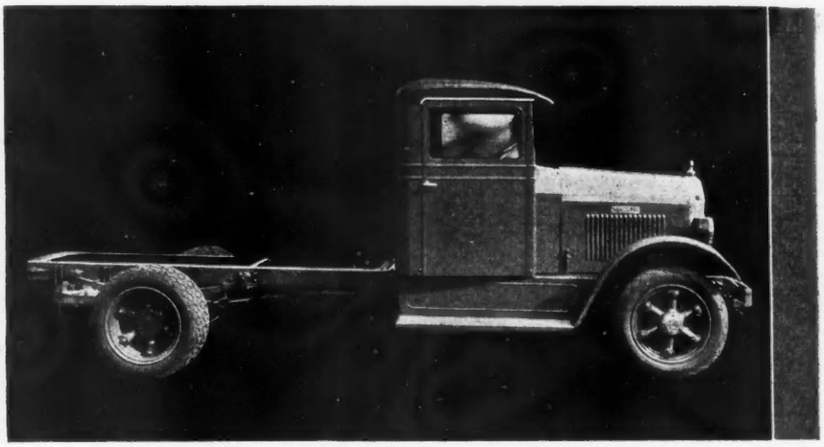


MACCAR 36200 IS 1½-TONNER

Specifications 1½-Ton Maccar

Model (designation)	36200
Capacity	1½-ton
Weight, chassis, lb.	4500 lb.
Gross weight rating (chassis, body and load)	9000 lb.
Wheelbase, standard in.	126 in.
optional, in.	154, 170 in.
Tires, front, in.	32 x 6 in.
rear, standard	32 x 6 in. dual
Engine, make and model	Buda HS 6
number and size of cylinders	6-3⅜ x 4½ in.
displacement	241.6 cu. in.
hp. at 2400 r.p.m.	55
valve arrangement	L
diameter of main bearings	4
piston material	cast iron
Oiling system	full pressure
Carburetor, make	Stromberg T 2
feed	vacuum
Ignition, make	Delco-Remy
Generator, make	Delco-Remy
how driven	gear
Starter, make	Delco-Remy
Gasoline tank, location	under seat
capacity, gal.	17 gal.
Radiator	tubular
Clutch, make and model	Brown-Lipe 30
type	multiple disk
Transmission, make	Brown-Lipe
where mounted	unit
number speeds	4
Universals	metal
Propeller shaft	double
Rear axle, make and model	Timken 56000
final drive	bevel
type	full floating
ratio, standard	6-1/6 to 1
ratio, optional	5-2/7 to 1 or 7-2/5 to 1
Drive and torque	springs
Steering gear type	cam and lever
Service brake, make	Lockheed
type	internal
method of operation	hydraulic
size of drum, front	16 x 2½ in.
size of drum, rear	16 x 3½ in.
Hand brake, type	external
location	transmission
size	8½ x 2 in.
Springs, front	42 x 2½ in.-10
Springs, rear	54 x 2½ in.-10
Auxiliary springs, number of leaves	4
Frame, depth	5⅞ x 3 x 1¼ in.
flange width	
thickness	
type	channel
Wheels, type	cast steel

DUAL pneumatic rear tires, four-speed transmission, six-cylinder 55 hp. engine, four-wheel hydraulic brakes and chassis weight of 4500 lb. are some of the specifications which identify the new Maccar 1½-ton truck. Body allowance is 1500 lb. which added to chassis weight and rated carrying capacity gives a total gross weight rating of 9000 lb.



Maccar 1½-ton 36200 is a six-cylinder, four-speed, bevel-gear drive, pneumatic tired truck weighing 4500 lb.

Rear axle is a bevel-drive full-floating Timken with straddle-mounted pinion. A two-piece propeller shaft is used.

The radiator is supported on a cork pad and the core is secured at three points in a four-piece cast aluminum shell. Core is of continuous fin and tube construction with cast bronze tank.

Three wheelbases are available, 126, 154 and 170 in. to accommodate 7, 10 and 12-ft. bodies respectively. Standard equipment includes armored wiring, speedometer, air cleaner, Moto Meter and tire carrier.

SHOP ACCURACY

(Continued from page 35)

out of line, one side of the protractor will not contact with the top of the block.

Replacing a crankshaft involves so much labor that inspectors wish to be sure of the true condition of an engine before recommending an overhaul. Measuring crankpins is not difficult. Variation in diameter at different points along the pin, commonly called spooling, is measured directly by micrometer or by a dial gage set for standard size. Out-of-roundness, likewise, is measured by micrometer or special dial gages.

Main bearing journals, which are not less important that the crankpins, can be measured without dismantling the engine. This is done by taking off the bearing caps, one at a time, and measuring with a dial gage the up and down movement of the surface of the shaft while the engine is being turned over slowly by hand.

After major units have been disassembled the component parts are inspected to determine whether they shall be repaired, renewed or replaced. Off-center and out-of-round conditions are measured on the bench with instruments which put an end to guesswork.

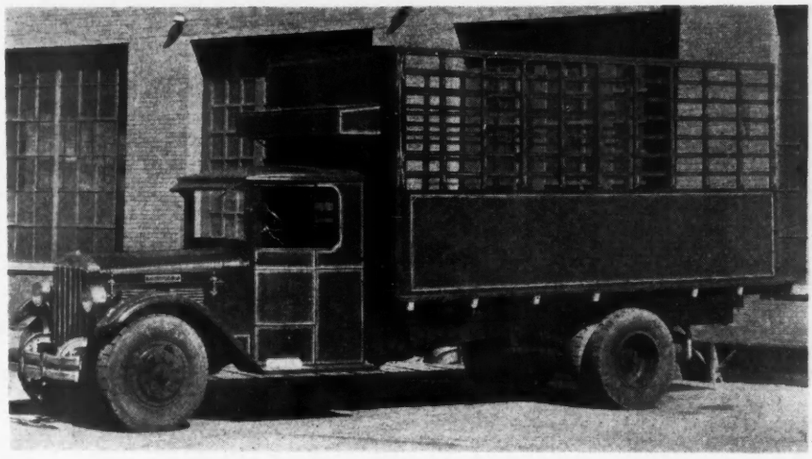
Locating true top dead center of an engine with no markings on the flywheel is not the easiest job a mechanic is called upon to accomplish. Near the top of the stroke the piston moves so little for a given movement of the flywheel that it is very hard to decide just when top is reached. A dial gage solves this problem as it indicates movement of the piston in thousandths of an inch and shows the top dead spot very clearly. Valve lift is measured the same way.

During the manufacture of a truck repeated inspections are made to insure that parts are exactly the right size. The tolerance, or permissible variation, is less than .001 in. in many instances. Go and No-Go gages, which show at once whether a part is standard, undersize or over-size, are used for many of these inspections. Although this measurement indicates size, it is actually a comparison with a standard.

Exhaust actuated sand box made by the Auto-Schleuderschutz-Sandstreuer, Berlin - Charlottenburg, Tegeler Weg 28-32. Sand is ejected automatically when applying the brake or intentionally when starting. As sand drops into the ejecting funnel the exhaust directs the sand at the wheel

DIAMOND T 3-TON IS HIGH SPEED TYPE

Model 600 Has 6-Cylinder Engine, 7-Speed Transmission and Power-Operated Hydraulic 4-Wheel Brakes

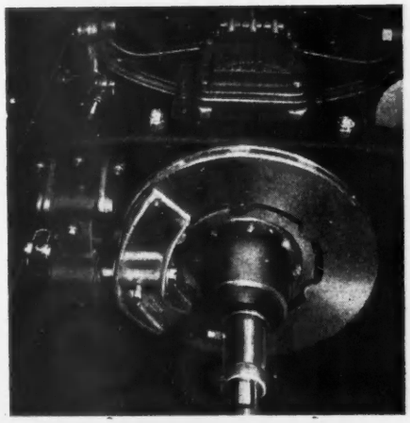


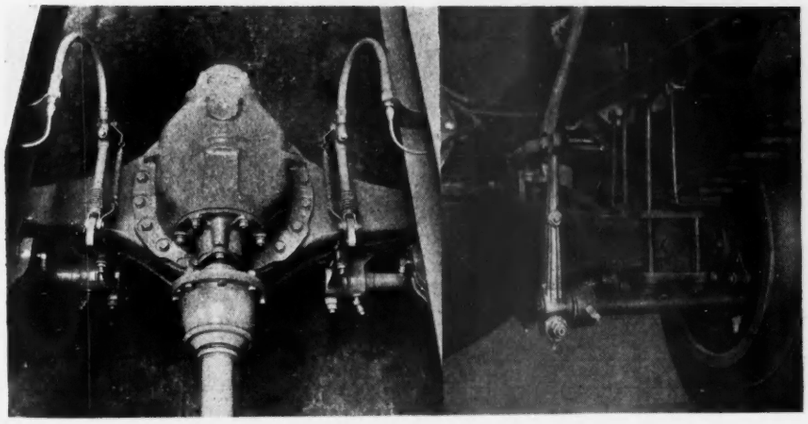
New Diamond T Model 600 three-ton chassis. The specially designed cab long hood and cowl are responsible for lowness in appearance. Note spring bar bumper, tapered frame and tire carrier

Specifications Diamond T 600

Model	600
Capacity, tonnage rating	3 ton
Wheelbase	145½, 153½, 224½ in.
Tires	36x8 in. pneumatic, dual rears
optional	solid tires
Engine	Hercules YXC
size	6-4¾x4¾
hp. @ 2200 r.p.m.	93.5
number of main bearings	7
diameter of main bearings	3 in.
piston material	cast iron
Carburetor, feed	gravity
Clutch, make and model	Covert
type	multiple disk
Transmission, make and model	Brown-Lipe
where mounted	amidship
number speeds	7
Rear Axle	Timken
final drive	worm
Service Brake, front	Lockheed internal hydraulic
rear, make	Timken Duplex, hydraulic operation
auxiliary	B-K vacuum booster
Hand Brake, make	Tru-Stop
location	transmission
type	16-in. disk
Springs, front	2½x46 in.
rear	3x56 in.
auxiliary	3x56 in. 6 leaves
Drive, how taken	radius rods
Torque, how taken	Springs

Close-up views showing rear axle and Timken Duplex brake construction, and Tru-Stop transmission brake





DIAMOND T MOTOR CAR CO. of Chicago is in production with a new three-ton chassis specially designed for high speed heavy duty service. The long graceful lines which feature other Diamond T models are carried out in this model. It is also featured by a six-cylinder engine, seven-speed transmission, hydraulic and vacuum operated four-wheel brakes and 36 x 8 in. pneumatics with dual rears.

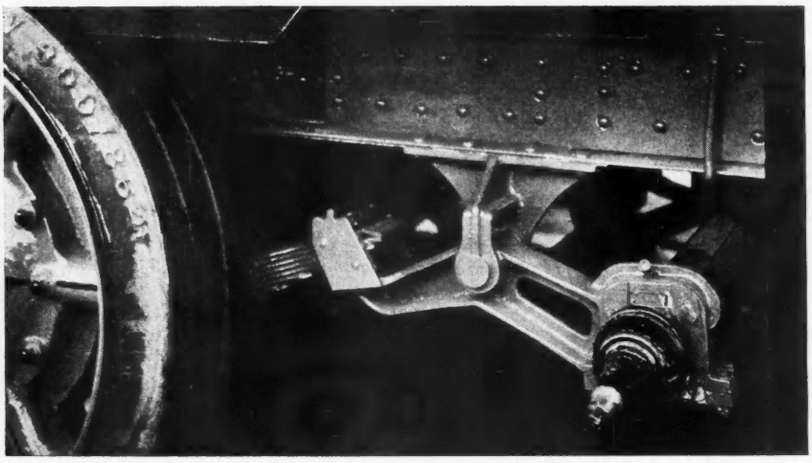
Model 600, as it is designated, is offered in wheelbases ranging from 145½ in. for tractor use, 153½ in. for 3½-4 yd. dump body to 224½ in. for a 20 ft. body behind cab.

The powerplant is a six-cylinder 4⅜ x 4¾ in. Hercules YXC developing 93.5 hp. at 2200 r.p.m. Fuel feed is by gravity with the option of extra tanks, at the side of the frame with vacuum feed. Power is transmitted through a Covert multiple disk clutch to a two-range, amidship-mounted Brown-Lipe transmission, which furnishes seven speeds forward and two reverse. With a 6 to 1 rear axle ratio a top speed of 40 m.p.h. at 1800 r.p.m. of the engine can be maintained. Final drive is through a Timken worm drive rear axle.

Lockheed internal hydraulic brakes are employed in the front wheels, while Timken Duplex brakes hydraulically operated from the same master cylinder are used at the rear. Foot power is supplemented by a B-K vacuum booster, which is trunnion

(Turn to page 60, please)

EXTRA AXLE CARRIES 1/3 REAR LOAD



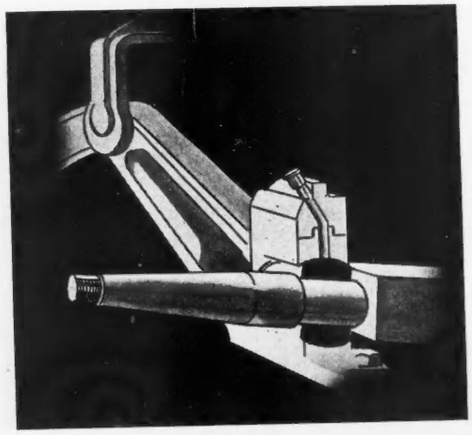
Utility 6-Wheel Units May Be Installed on 1½ to 7½ Ton Trucks

Wheel removed showing installation of unit on an I-beam frame chassis. Wheels turn and rocker-arms pivot on double Timken roller bearings. Rocker-arms are pivot mounted on steel brackets bolted to the frame. Note connections of dead axle and spring

THE Utility Trailer Mfg. Co., Los Angeles, Cal., is making a non-drive auxiliary axle, known as the Utility 6-wheel unit, for installing on all makes of trucks ranging from 1½ to 7½ tons capacity. This unit, which is obtainable with pneumatic or solid tires, is not only designed to enable operators of heavy trucks to keep within low gross weight limits prescribed by some states, but to increase the capacity of trucks generally. The unit is mounted to the rear of the truck axle and carries 11/27 of the total rear end load of the truck except that portion which is unsprung.

The unit consists of a pair of wheels, Timken roller-bearing mounted, forged steel axle, connecting levers and supporting brackets. The levers are pivot mounted in steel brackets bolted to the frame at a point a little to the rear of the rear springs. The front ends of the levers link to the regular truck springs and the rear ends connect to the axle of the unit through spherical bearings. The ball and socket action of these bearings permit the axle to oscillate vertically without binding, thereby permitting one wheel of the unit to drop in a hole while the other rises over an obstruction without racking or bending.

The fulcrum of the lever is so located that the load-center is moved 14 in. to the rear of the drive axle. It is claimed that owing to the balancing of the point of attachment to the frame between the drive wheels and the unit wheels, shock to truck, tires and load is reduced one-half. The unit weighs 1250 lb.

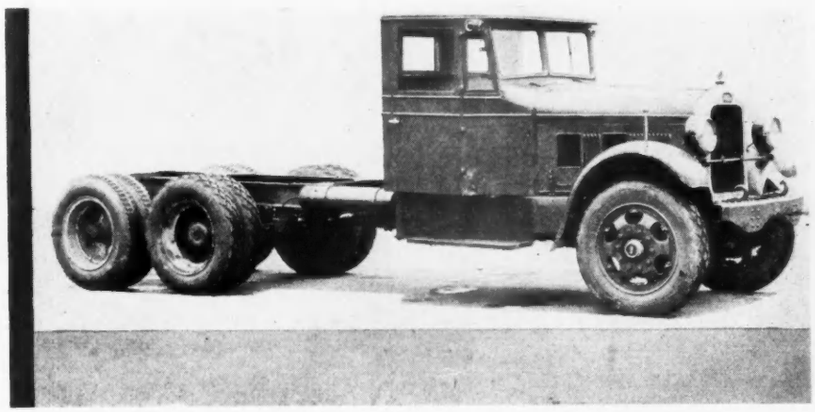


Left: Section of the spherical bearing, which forms the connection between rear of rocker arm and dead axle to permit universal action

Below: Utility 6-wheel unit installed on a pneumatic tire AK Mack. The photograph shows the unit riding over an 8-inch obstruction and how it aligns itself to road unevenness

WHITE MAKES MODEL 59 TO ORDER

New 6-Cylinder Unit Sold on Specifications to Meet Users Needs



New White Model 59 equipped with pneumatic tires all around and extra rear axle

A SIX-CYLINDER, 100 hp. tractor truck, known as Model 59, is being offered by the White Company. This new model, practically custom built from standard units, is sold only on specifications, which are based upon a study of the service for which each unit is to be used. Model 59 also is available as a truck for handling unusually heavy loads at high speeds and has been adopted for use as a six-wheel unit. While the standard tractor wheelbase is 153 in. the length varies, depending on the job.

The powerplant, which is virtually the same as that used in the White bus Model 54, has a 4⅜ in. bore and 5¾ in. stroke, overhead valves and dual ignition and is mounted in unit with a two-plate dry clutch and a four-speed transmission. The radiator consists of a cast aluminum shell with removable core flexibly mounted.

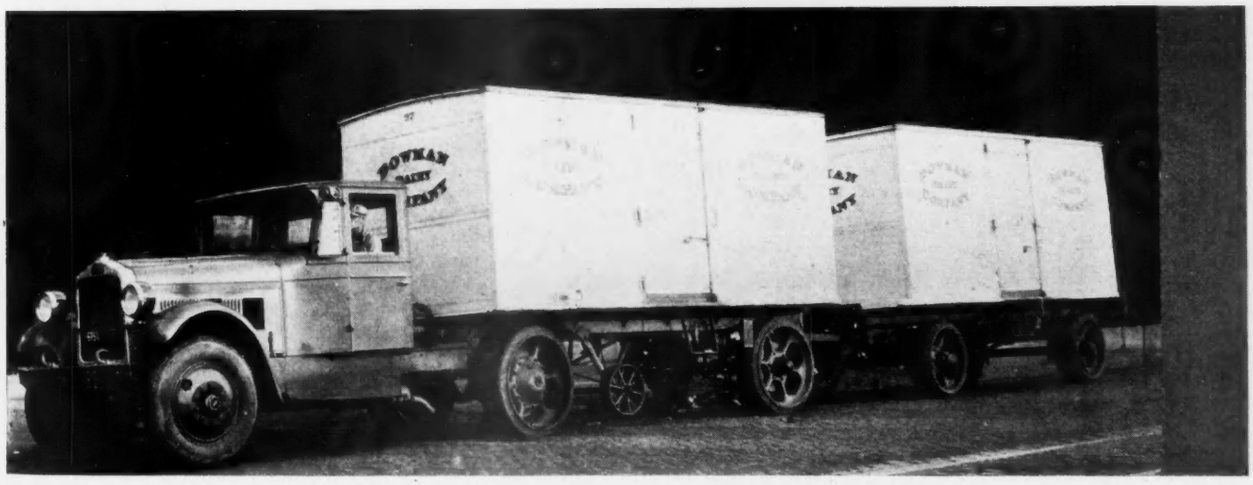
Internal four-wheel air operated brakes are employed. Air pressure is obtained from a six cu. ft. Westinghouse air compressor driven by the engine. The hand brake acts externally on drive shaft drums. Front and rear springs are semi-elliptic and made of alloy steel. The rear springs are of slipper type construction.

Final drive is through a heavy duty double reduction rear axle, the gear ratio of which depends on the proposed operation. Among the ratios available are: 13.1; 11.7 to 1; 10.1 to 1; 9.33 to 1; 8.87 to 1, and 7.63 to 1.

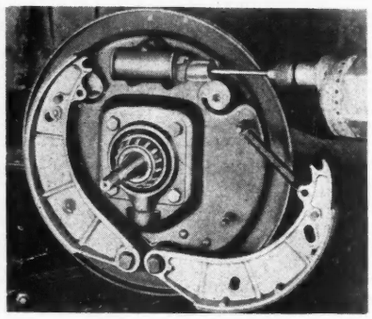
Model 59 White tractor truck is adapted to heavy duty service

Specifications White Model 59

Model	59
Wheelbase	153 in.
Tires, front	38x9.00 balloon
rear	40x12 in. solid
Engine	White
size	6-4⅜x5¾ in.
hp.	100
Ignition	battery, 2 plugs
Gasoline feed	Autopulse
Clutch	two plate
Transmission	4-speed
mounted	unit
ratios 1st	5.65 to 1
2nd	2.68 to 1
3rd	1.64 to 1
4th	direct
reverse	6.38 to 1
Service Brake operated	4-wheel internal Westinghouse air
Hand Brake	external double drum
location	driveshaft
Steering gear	cam and lever
Frame	8 in. I-beam
Rear Axle	White double reduction
Length, overall	221½ in.
Length, dash to center of rear axle	110⅞ in.
Length, dash to end of frame	148⅞ in.



NEW PRODUCTS FOR THE TRUCK MARKET

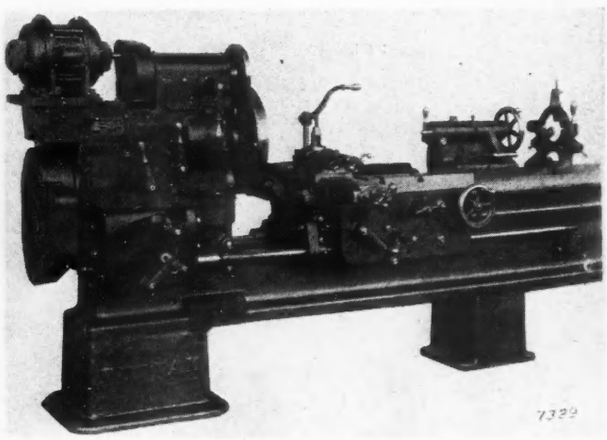


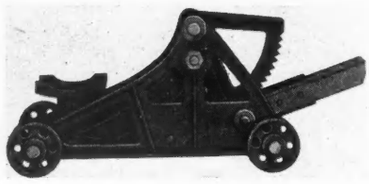
Polishing Tool

This tool, made by Grimes Brake Engineering Service, Syracuse, N. Y., for polishing hydraulic brake wheel cylinders is designed for use with an electric drill. It consists of a 4-in. round shank, for fitting into the drill chuck; a universal joint protected by a thick rubber shield; and a 1¾-in. head, which carries the polishing element. This element consists of two 2½ x 2 x 3/16-in. rubber flaps firmly screwed to the head. Strips of abrasive cloth 4 in. long are placed under the flaps and held in place by nails serving as teeth, which project into the rubber. The cloth is readily replaceable for rough or fine work. The flaps serve as a form for the abrasive cloth. Price, $5.

Gap Lathe

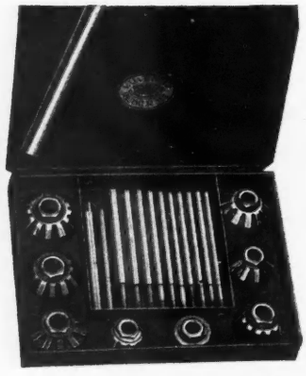
Two sizes of lathes with sliding bases which adapt them for use as gap lathes or for handling long parts are offered by the Shaw Crane Putnam Machine Co., Inc., Fitchburg, Mass. The smaller size is 18 and 36 in. swing and the larger 22 and 46 in. swing. The lathe bed is double with the upper part fitted to a self-centering dovetailed slide in the lower base. It is locked by steel cross bolts and is moved by means of a rack and pinion. Because of the sliding bed feature these lathes have a gap and center capacity approximately twice that of an ordinary lathe and may be used for turning brake drums while in place on wheels. Actual swing over ways of the smaller lathe is 18⅜ in. and of the larger model 22½ in. Swing through the gap is 36¼ in. and 46¼ in. respectively.





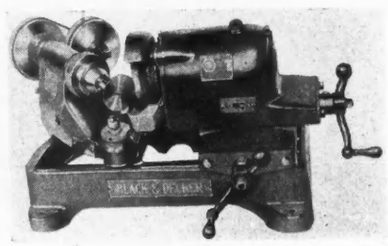
Curb Jack

Made by the Auto Specialties Mfg. Co., St. Joseph, Mich., this jack, designated as No. 250, is built low and is operated by a short handle stroke. Specifications are as follows: Height, 5 in.; raised height, 16 in.; capacity, 3000 lb.; weight, 45 lb.; handle, 58 in.



Seat Reamer

The feature of this tool made by the Spraker Mfg. Co., Indianapolis, is the fact that the cutting blades can be removed and replaced when dull. Cutter blocks or blade holders are furnished in all sizes and are made with a standard tapered opening to fit pilot heads on most standard reamers and reseaters.

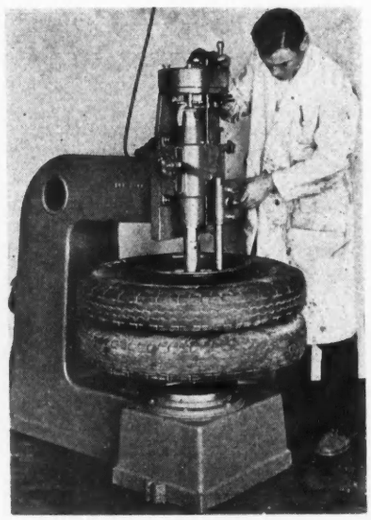


Valve Refacer

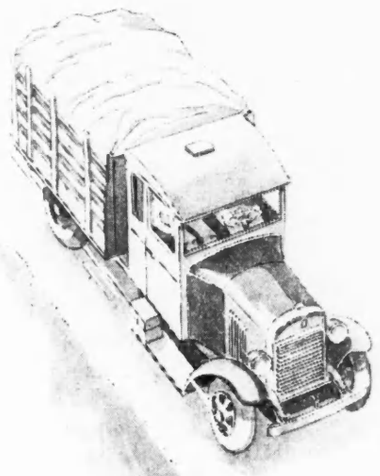
This new model to the Black & Decker line of refacers takes valves from ⅛ to 41/64 in. and the machine may be adjusted to any angle from 15 to 90 deg. The grinding wheel is driven by one motor and the chuck spindle by another through a double reduction belt reduction. Special rubber belts are furnished.

Drum Lathe

When truing brake drums on this vertical lathe, developed by the Bendix Corp., wheels are first mounted on a special arbor equipped with adapters which fit snugly into hub race recesses. This assembly is then mounted between the vertical centers of the lathe, with weight resting on headstock center. Feed of the cutting tool is controlled by a lead screw in the tailstock and cross feed is controlled by a micrometer screw. Change gears are located in the upper arm and the electric motor in the base. A grinding attachment is available for those preferring to grind drums. The lathe may be also used for removing ring gear of flywheels, truing wheels and facing drums. Swing is 48 in.

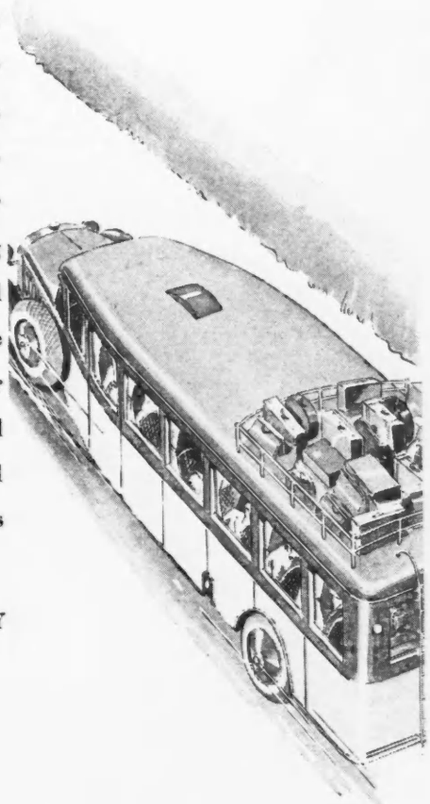


Good Steering *speeds up schedules*



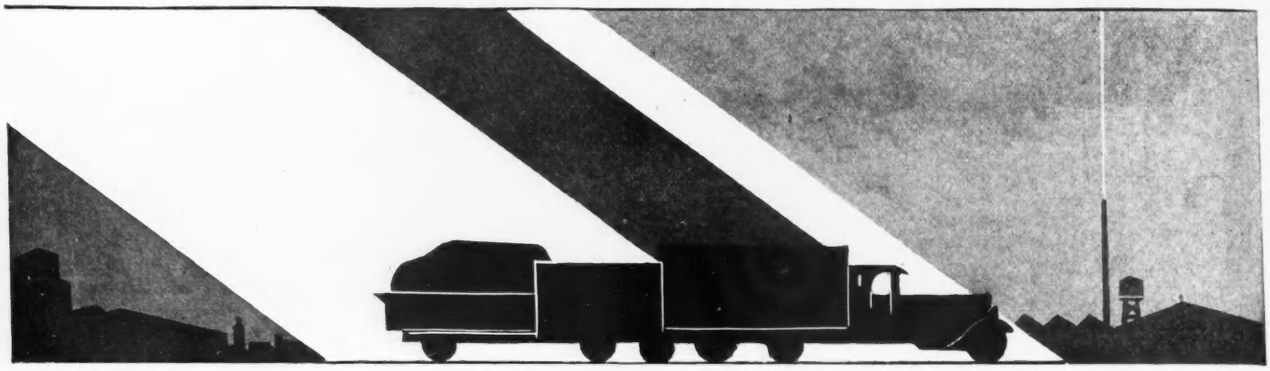
A BUS or truck that is equipped with Ross Cam and Lever Steering will make better time, all other factors being equal, than one that is hard to steer. The easy responsiveness of Ross Steering enables a driver to get in and out of traffic faster and with greater safety—and to get over an open road with fewer slow-downs for curves, rough spots and loose gravel. Ross not only provides easier steering, but steadier steering as well. By controlling road-shock it eliminates jiggle and jerk in the wheel, and holds the front wheels true to the course over any kind of going. Ross Cam and Lever Steering Gears are standard equipment on the majority of buses and trucks.

ROSS GEAR & TOOL COMPANY
LAFAYETTE, INDIANA



ROSS Cam AND Lever STEERING

TRUCK INDUSTRY



N-E-W-S

Gotfredson Employees Form New Company

Truck and Parts, Ltd., has been organized by five former employees of the Gotfredson Corp., Ltd., which recently passed into a receivership, as an independent firm to continue the manufacture of Gotfredson trucks in Canada and to provide service for trucks now in use. Formation of the Robert Gotfredson Corp. with headquarters at 3599 Gratiot Ave., Detroit, is announced by Robert Gotfredson, former vice-president of the Gotfredson Truck Corp.

Reo Has 7-Man Board

A seven-man board of directors in place of the former board of eight members was elected by the stockholders of Reo Motor Car Co. in annual meeting, April 16. Clarence A. Triphagen, formerly sales manager, was the retiring member. The board reelected Ranson E. Olds, chairman of the board; Richard H. Scott, president; Horace T. Thomas, vice-president, and Donald E. Bates, secretary and treasurer.

Charles F. Folkman

Charles F. Folkman, vice-president, Four-Wheel Drive Auto Co., died at his home April 10. Mr. Folkman, who was 64 years old, became a member of the directorate in 1911 and first vice-president in 1917.

McAneeny Heads Hudson

William J. McAneeny has been elected president and general manager of the Hudson Motor Car Co. Associated with him will be J. H. Whittaker, first vice-president and assistant general manager; A. Barit, vice-president and treasurer; Courtney Johnson, general sales manager, and Stuart G. Baits, chief engineer.

New Record for Young Radiator

The Young Radiator Co. reports that it had more orders on file and made more shipments during the month of March than at any previous period in its history.

White Co. executives recently changed and promoted: Thomas Blageden, Jr., Australian Division manager, to vice-president of the export region; L. M. Hart, managing director of the White Co., Ltd. to vice-president of the White Co., Ltd., in charge of the Canadian region; and Jay Rathbun, vice-president, to devote his time to the growing demands of the Eastern region

New Stewart 4-Ton Has 12 Speeds

The Stewart Motor Corp. has announced that a Brown-Lipe 3-speed auxiliary transmission has been incorporated in its Model 22X, 6-cylinder, 4-ton truck. The auxiliary is mounted amidships and when used in connection with the standard unit-mounted 4-speed transmission produces a range of 12 speeds.

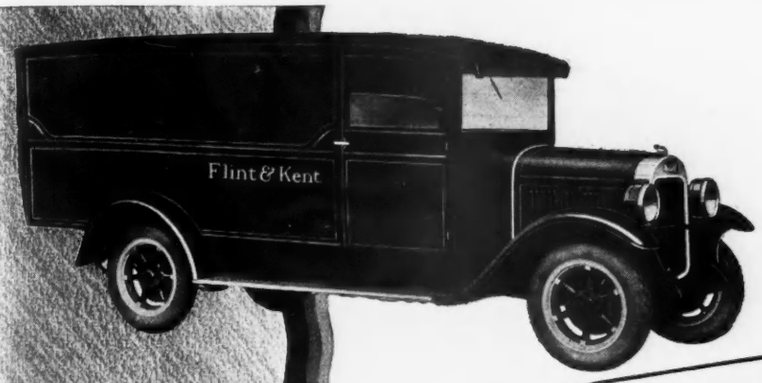
G.M. Earns $61,910,987

The General Motors Corp. reports earnings for the first quarter of 1929 as $61,910,987 as compared with $69,468,576 in the corresponding period last year.

Rim and Wheel Holds Convention

Representatives of the National Wheel & Rim Association recently assembled in convention at Detroit and discussed credit and sale matters. Particular attention was given to the problem of promoting greater public consciousness of the advantages accruing from inspection and care for motor vehicle rims, wheels and parts, in the way of increased tire mileage and easier driving.

Commercial Car Specifications on Page 65



1 Ton
6 cylinder
4 wheel Brakes
$995
Chassis

THE 1929 STEWARTS

. . . are being hailed as the outstanding truck value of the age

BEFORE you buy a truck, learn Stewart records for long life and low repair bills. They are outstanding in the industry. The Stewart buyer can divide the initial cost of his truck by 5 years or more. Many Stewarts are still in operation after 8, 10, and 12 years of constant service. This ability to stay on the road and out of the repair shop year after year has earned Stewart a world-wide reputation as "America's Greatest Truck Value."

Stewart Sales are Increasing

1926 sales — 41% ahead of 1925
1927 sales — 45% ahead of 1926
1928 sales — 53% ahead of 1927

These figures tell the story of Stewart success in 600 American cities and 56 foreign countries. Learn why! Catalogs gladly mailed upon request.

STEWART MOTOR CORPORATION
BUFFALO, N. Y.
Export Branch: 1 BROADWAY (Dept. 3) NEW YORK CITY
Cable Address, Stewartruk New York, Codes Acme & Bentley

Models

¾ Ton
6 Cylinder . . . $895 Chassis
1 Ton
6 Cylinder . . . $995 Chassis
1¼ Ton
4 or 6 Cylinder . . $1295 Chassis
1½ Ton
4 or 6 Cylinder . . $1645 Chassis
2 Ton
4 or 6 Cylinder . . $1975 Chassis
Worm Axle . . $2095 Chassis
2½ Ton
6 Cylinder . . . $2690 Chassis
3½ Ton
6 Cylinder . . . $3690 Chassis
4 Ton
6 Cylinder . . . $4200 Chassis

All prices f.o.b. Buffalo

Stewart
MOTOR TRUCKS

3½ Ton
6 cylinder
4 wheel Brakes
$3690
Chassis

Stewart Trucks Have Won By Costing Less to Run

Lehigh Valley to Build Terminal Warehouse

According to plans recently announced by the Lehigh Valley Railroad, Lehigh Valley Terminal Warehouse, Inc., proposes to build a new $10,000,000 terminal warehouse on the Hudson River between Twenty-sixth and Twenty-seventh Sts., New York City. The building will be 12 stories high, providing a total floor area of 1,500,000 sq. ft. Accommodations are provided on the first floor for 54 freight cars and a platform long enough to serve 72 trucks. A driveway will extend through the entire building to permit trucking traffic in both directions.

Wilcox With Federal

George D. Wilcox has been appointed advertising manager of the Federal Motor Truck Co. Mr. Wilcox, engaged in advertising during the past 18 years, was formerly advertising manager with Regal, Republic and Detroit Lubricator.

Huxley Diamond T Vice-President

T. C. Huxley, Jr. has been made a vice-president of the Diamond T Motor Car Co. in charge of eastern sales. Announcement is also made of the appointment of E. A. Haskins as general service manager. Mr. Haskins was formerly with the Hercules Motor Co.

Hanson Directs FWD Advertising

Advertising of the Four Wheel Drive Auto Co. in the present campaign will be handled by Freeze-Vogel-Crawford, Inc., under the direction of W. M. Hanson, who has been in charge of the Clintonville, Wis., concern's advertising since 1925.

Kelly Elected President

Daniel H. Kelly, executive vice-president of the Electric Auto-Lite Co., has been named president of the USL Battery Corp., subsidiary. C. O. Miniger was elected chairman of the board, succeeding E. H. Gold, who died in November.

Wood Builds Addition

The addition of 18,000 sq. ft. of floor space to the body plant of the Wood Hydraulic Hoist & Body Co., Detroit, completes the first step in the company's large expansion program to increase the capacity of all its departments.

Wheel Companies Merge

Stockholders of Kelsey-Hayes Wheel Corp. and Wire Wheel Corp. met coincidentally April 25 and approved the merging of these two companies. The board of the new corporation, which will be known as the Kelsey-Hayes Wheel Corp., will consist of 15 directors, 11 from the Kelsey board and four from Wire Wheel.

Taylor Autocar Works Manager

William G. Taylor has been appointed works manager of the Autocar Motor truck plant at Ardmore, Pa., succeeding F. W. Ayres, who has gone to Russia. Mr. Taylor joined the Autocar organization early in 1928 as toll engineer. He has been in the industry since 1907.

Sterling Sales Increase

Deliveries by the Sterling Motor Truck Co. for the first five months of the fiscal year beginning Nov., 1928, were 80 per cent above the same period a year ago, it is announced. March was the largest month in the company's history, with orders running 15 per cent in excess of deliveries.

Bottlers to Meet Nov. 11 to 15

The annual exposition and convention of the American Bottlers of Carbonated Beverages will be held at Atlantic City, Nov. 11 to 15. Approximately 70 per cent of the exhibit space has been reserved during the past four weeks.

Autocar Branch Makes Record

The Philadelphia factory branch of the Autocar Co. established a new record when it sold during the first quarter of this year 162 new trucks to 56 concerns in the Philadelphia territory alone.

Maurice Switzer Dies

Maurice Switzer, vice-president of the Kelly-Springfield Tire Co., died at Atlantic City early in April after an illness of four weeks. He was 58 years old.

Fruehauf Profits Gain

The Fruehauf Trailer Co. and subsidiary reports a net income for the year ended Dec. 31, 1928, of $285,312, which compares with $160,628 for 1927.

Studebaker Sales Double

Commercial car sales of the Studebaker Corp. of America during the first quarter of 1929 increased 93 per cent over the same period of last year.

Coming Events

SHOWS

Atlantic City—American Bottlers of Carbonated Beverages .....Nov. 11-15
Chicago—Motor & Equipment Assn. Nov. 4-9
Detroit—National Standard Parts Assn. .....Nov. 11-16

CONVENTIONS

Chicago—Hotel Stevens — National Highway Traffic Assn. .....May 13-15
Chicago—National Safety Congress, Sept. 30-Oct. 4
Detroit—National Standard Parts Assn. .....Nov. 11-16
Saranac Lake—S.A.E. Summer Meeting .....June 25-28

Republic Truck Merges With American-LaFrance

The boards of directors of the Republic Motor Truck Co., Inc., Alma, Mich. and the Commercial Truck Division of the American LaFrance and Foamite Corp. agreed to consolidate these two companies subject to ratification by the stockholders at a special meeting called for May 15, according to an announcement by officials of the two concerns. The new company will be known as the LaFrance-Republic Corp. Charles B. Rose, president of the American-LaFrance and Foamite Corp., will be president. It is planned to sell the American-LaFrance plant at Bloomfield, N. J. and concentrate all manufacturing activities at Alma, Mich.

Durant Appoints Cary

C. P. Cary has been appointed manager of the commercial vehicle of Durant Motors, Inc., according to R. T. Hodgkins, general sales manager. Mr. Cary has been in the truck industry for a quarter of a century, having been associated with Franklin, Peerless, Garford and Graham Brothers.

Fruehauf Names Allman

Leslie C. Allman has been appointed sales promotion manager of the Fruehauf Trailer Co. Mr. Allman has been engaged in merchandising and advertising activities for 15 years.

Peak Quarter for Parts

Manufacturers and wholesalers of automotive parts, accessories and equipment closed the first quarter of 1929 at levels far in excess of any similar period in the history of the industry, according to the Motor & Equipment Association.

John Cleary in New Post

John Cleary, formerly advertising director of the Cadillac Motor Car Co. and the Peerless Motor Car Co., and until recently editor of Motor Age, has joined the Eugene McGuckin Co., Philadelphia advertising agency.

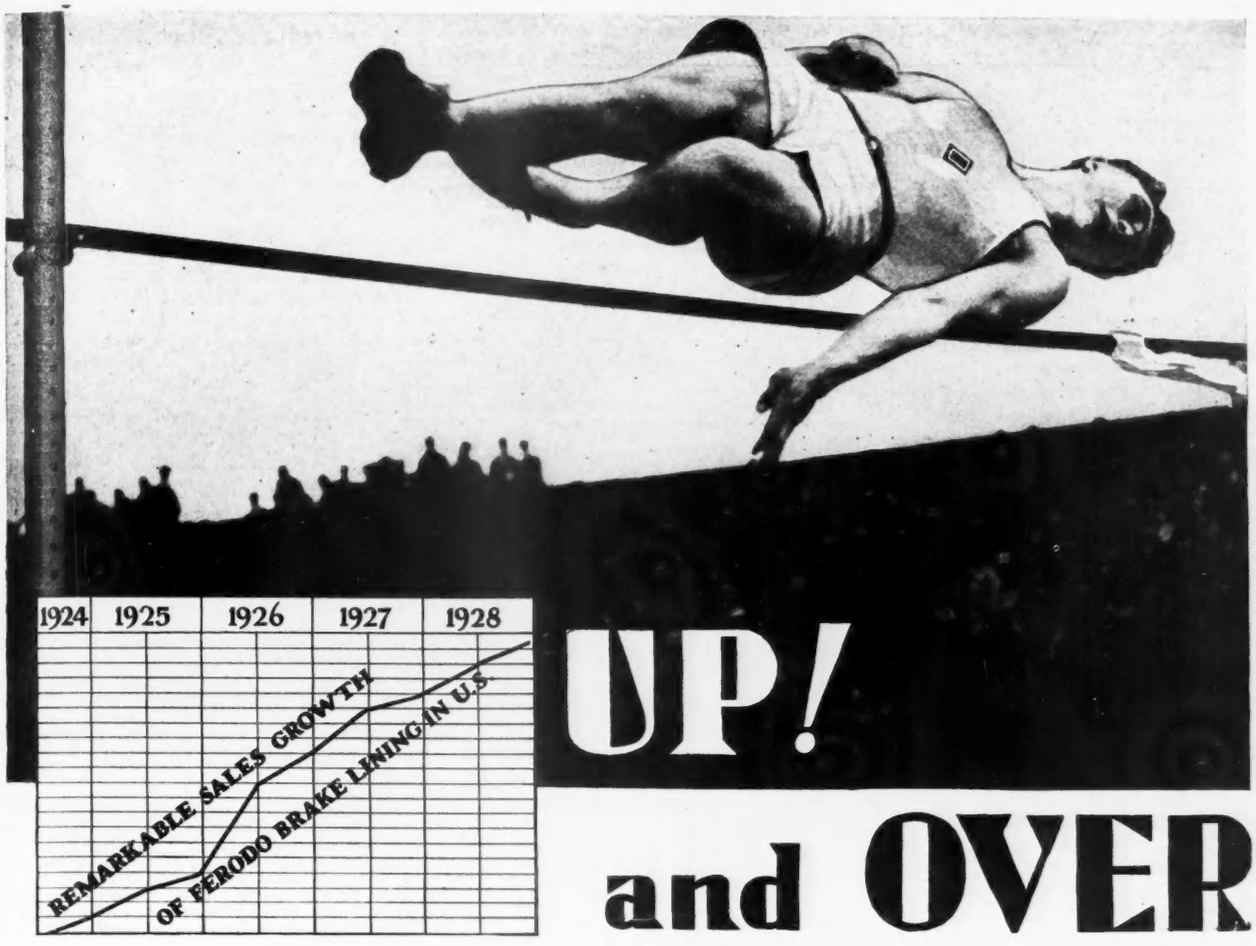
Timken Earnings Up

Timken Roller Bearing Co. reports net earnings for the first quarter as $4,264,225. The statement indicates increased business over last year, when earnings for the first six months were $6,395,571.

Simonds F.W.D. Sales Engineer

G. D. Simonds has been appointed sales engineer for the Four Wheel Drive Auto Co., with headquarters in New York City. Mr. Simonds was formerly with the Graybar Electric Co. as toll sales engineer.

Commercial Car Specifications on Page 65



UP! and OVER

to new records - - - -
FERODO *must* be better

There can be no other reason for the mounting records of Ferodo sales. Ferodo Brake Lining lists at 30% more a foot than ordinary linings—yet, as the chart shows, sales have grown phenomenally *every* year, from the very time Ferodo started in the United States.

Ferodo *must* be better! And it is: it will not burn; it does not glaze; it is practically impervious to moisture; it outlasts ordinary linings by thousands of miles; it—but read the "ten counts of superiority." Then test out Ferodo Brake Lining on one of your own vehicles—that will convince you that Ferodo *is* better.

10 Points of Superiority:

1. High Average wear-life.
2. Constant Gripping Power (coefficient of friction) to over 550° F.
3. Safe brakes in wet weather.
4. Will not burn out.
5. Fewer adjustments.
6. No swelling or shrinkage.
7. Size accuracy — within tolerance of .005".
8. No glazing.
9. Silent, smooth operation.
10. Cheaper per mile of service.

FERODO AND ASBESTOS
INCORPORATED
New Brunswick, New Jersey

FERODO
REGISTERED
BRAKE LINING

E. 5-29

FWD Acquires Menominee Motor Truck

A majority of the stock of the Menominee Motor Truck Co. of Wisconsin has been acquired by the Four Wheel Drive Auto Co. The Menominee plant lies just across the railroad tracks from the FWD tracks. The subsidiary will be known as the Utility Supply Co. and will manufacture derricks, winches, power take-offs, trailers and earth boring machines. Utility equipment made in the the FWD plant will be diverted entirely into the new plant, which is being equipped with new machinery. The Menominee truck will continue to be manufactured by the subsidiary and will also be serviced by it.

M.E.A. Show and Convention

The annual business exhibit and convention of the Motor and Equipment Association will be held at the Coliseum in Chicago, Nov. 4 to 9, according to the executive committee.

Dot Lubricating Sells

The Dot Lubricating Equipment Co., Cambridge, Mass., has disposed of its entire lubricating equipment business to the Alemite Mfg. Co., which will continue its manufacture and sale. The reason for the transaction is the rapid growth of its fastener manufacturing business, in which it will hereafter specialize.

Registrations Increase 5.9 Per Cent

A total of 24,493,124 motor vehicles were registered in the United States during 1928, according to the U. S. Bureau of Public Roads and U. S. Census Bureau. This represents an increase of 5.9 per cent over the number registered in 1927.

Malotte Autopulse Sales Manager

Walter L. Malotte has been appointed sales manager of the standard equipment division of Autopulse Corp., according to P. A. Kent, president. During 15 years' affiliation with the automotive industry Mr. Malotte was connected with Gilliam and Hannum.

AC Sets High Mark

The AC Spark Plug Co. reached its highest mark for replacement sales in the first quarter of 1929. Each month in comparison with the same month a year ago showed an exceptional increase, according to W. S. Isherwood, general sales manager.

Texas Truck Operators Associate

More than 100 truck operators met in Austin, Texas, April 13 and formed the Texas Truck Owners Association. This organization was developed from the temporary organization formed five months ago. The new association contemplates an extensive survey of highway finances with reference to assisting the state in correlating and connecting improved highways. The following officers were elected: Don C. Sanders, president; William T. Wheeler, 1st vice-president; J. P. Tarry, 2nd vice-president; J. L. Naylor, 3rd vice-president and C. L. Abbott, treasurer.

Military Transportation Exposition at Holabird

A military transportation pageant and exposition, conducted under the auspices of the Army, will be held at the Holabird Quartermaster Depot, Baltimore, Md., June 12-14. The program will include exhibits depicting the rise of transportation through the ages; types of National Defense Forces employed by the government since its inception; demonstrations of the performance ability of army vehicles not produced commercially; demonstration of four-wheel drive trucks, tractors, six-wheel units, chain drives, gas-electric vehicles, etc.; tests will be made of vehicles equipped with every form of brake system; demonstration of the unit replacement system of vehicle maintenance; dissemination of information of value to the fleet operator in maintenance, etc. There will also be an exhibition of chassis, accessories and maintenance machinery, covering 50,000 sq. ft. Space has been made available to all automotive manufacturers.

Trailer Costs

HOW much does it cost for a truck to pull a trailer and how much does it cost to operate a trailer? These are two questions confronting every user, or prospective user of trailers. Obviously it costs something to pull a trailer and this extra cost is offset by greater income of the combination truck-trailer unit.

Cost figures for four-wheel trailers and the trucks pulling them will be given in an article in the June issue of *Commercial Car Journal and Operation & Maintenance*. They have been furnished by an intercity operator of long experience.

Black Returns from Abroad

Robert D. Black, advertising manager, and W. A. Rowe, production manager of the Black & Decker Mfg. Co., have returned from Europe, where they spent several months at the factory of Black & Decker, Ltd., Slough, Bucks, England.

To Open Body Plant

The Omaha Body Co. announces that it will open a truck body plant in the Hawkeye Truck Co. factory building, Sioux City, Iowa. The company will continue manufacturing at its Council Bluffs plant, shipping parts to Sioux City for assembly.

Waukesha Making 300 Hp. Great Six Engine

The Waukesha Motor Co. has started on its new 300 hp. Great Six engine, which is designed to operate either as a gasoline or kerosene-burning engine, and to burn Diesel fuel by the Rector system. The engine also is designed so that it can be operated on the regular Diesel cycle, if provided with suitable equipment. Sales during the past six months were the largest in the history of the company, running more than 75 per cent ahead of the corresponding period last year.

New Salesmen with Allbestos

The sales personnel of the Allbestos Corp. was recently augmented with the following: John G. McGee, district representative in Kentucky, Tennessee, southern Ohio, Indiana, Illinois and W. Virginia; J. H. McClelland, in charge of North Central States, with headquarters in Detroit; Sydney F. Croft, Jr., in charge of the Southeastern States, with headquarters in Atlanta, and C. A. Prettyman, Jr., has been added to the Philadelphia sales staff.

American Bosch Report

The American Bosch Magneto Corp. reports net profit after all charges for the first quarter of 1929 of $223,192, which compares with $71,276 for the corresponding quarter of 1928 before Federal taxes.

Durant Appoints Clark

J. M. Clark, formerly with the Federal Motor Truck Co., has been appointed Durant district manager of New York City and the surrounding territory.

Masury Goes Abroad

Alfred F. Masury, vice-president and chief engineer of the International Harvester Motor Co., recently sailed for Europe to visit the factories of foreign automotive manufacturers.

John C. Talcott

John C. Talcott, chief engineer, Pierce-Arrow Motor Car Co., died April 27 of pneumonia. He was 42 years old and connected with Pierce-Arrow since 1909, becoming chief engineer in 1927 upon the death of Charles Sheppy.

Reo Shows Big Increase

Reo Motor Car Co. reports net profit after all charges for the quarter ended March 31, of $537,514. This compares with net loss of $86,489 for the same period 1928.

Studebaker, 4½ Million

The Studebaker Corp. of America reports net profit for the first quarter of 1929 after all charges, but before preferred dividends, as $4,605,057. This compares with $3,979,873 for the corresponding quarter of 1928, an increase of over 15 per cent.

Commercial Car Specifications on Page 65

Meeting an Urgent Demand for Better Brakes

THE EVIDENCES as to why a motor truck should be equipped with Lockheed Hydraulic Four-Wheel Brakes are becoming so strong that many truck manufacturers feel literally compelled by the necessities of their market to follow the leading motor truck manufacturers and adopt

LOCKHEED HYDRAULICS

HYDRAULIC BRAKE COMPANY, DETROIT, MICHIGAN, U. S. A.

TERMINAL TRAFFIC

(Continued from page 27)

each direction between Louisville and Indianapolis. The trucks leave each terminal late in the afternoon of each day and make store-door deliveries of the goods the next morning in the other city. Shipments of more than 3000 lb. each are picked up at the shippers' store-doors and delivered directly to the consignees' places of business without passing through the terminals at all. No extra charge is made for the pick-up service if the shipments exceed 3000 lb. in weight. Smaller shipments must be delivered to the terminals by the shippers, or arrangements must be made with the terminal companies at either end to call for the goods to be taken to the terminals. A charge is made for the pick-up service accorded to small consignments.

The motor freight operators using a truck terminal seek to attract and retain traffic in several definite ways.

First: The contracts between the operators and the motor terminal company provide for the maintenance by the terminal company of forces of traffic solicitors who call upon prospective shippers and consignees, to solicit traffic for all of the carriers using the terminal.

Second: The terminal company advertises in local and sectional newspapers and other periodicals the services available to shippers and consignees.

Third: The individual carriers advertise their respective services in local newspapers published in towns along their routes.

Fourth: The terminal company and the individual carriers issue handbills or "flyers" announcing and advertising their services.

Fifth: The terminal company cooperates with the local chamber of commerce, board of trade, trade associations or other local trade promotion bodies in making information concerning the services and rates of the truck operators available to all of the association members.

The Denny Motor Transfer Co., referred to above, issues direct soliciting announcements of its service such as the following:

Announcement: Commencing Monday, December 3rd, 1928, we will operate a Motor Truck Line between Louisville, Ky., and Indianapolis, Ind.

Louisville Office: Central Truck Depot, Inc., 110-118 North Floyd St., Phones: City 857 and 858; Indianapolis Office: Central Union Truck Terminal, Inc., 415 South Pennsylvania St., Phone: Lincoln 4838.

Daily Service leaving Terminals at 4.30 p.m. making store-door delivery beginning 6 a.m.

Note: No intermediate stops make this the fastest possible service between Louisville and Indianapolis. In the near future daylight service will be added.

This Line under supervision of Indiana Public Service Commission, Franchise No. 914 M.—Cargoes fully insured.

Your patronage of this new service is hereby solicited.—*Denny Motor Transfer Co., Inc., New Albany, Ind.*

The cooperation of the Louisville Board of Trade was enlisted at the outset. The traffic bureau of this association called the attention of the members to the Denny service in a bulletin. Cooperation of this sort is of benefit to carriers and shippers alike. The carriers are supported in their efforts to attract traffic and the shippers are benefited through obtaining information respecting the establishment of transportation services.

Advertising, cooperation and service are the foundation stones upon which successful truck transportation is based.

(The next article in this series on Central Truck Terminals will discuss tariffs and rate-making practices.)

Official Classification—rates in cents per 100 lb.
(Same rates apply from Indianapolis to Louisville.)

Class	1	2	3	4	5	6	R25	R26
Louisville to Indianapolis	56½	48½	38½	31	31	31	41½	33

Minimum charge, 50 cents.

Shipments 3000 lb. and over picked up at shipper's door.

Shipments from Indianapolis to New Albany, Ind., and Jeffersonville, Ind., will be handled via Louisville, Ky.

We also operate daily Truck Service from Louisville, Ky., to Orleans, Ind., Mitchell, Ind.; Bedford Ind., from Central Truck Depot in Louisville, Ky.

CUSTOM BODIES

(Continued from page 25)

are grooved and slide in angle irons.

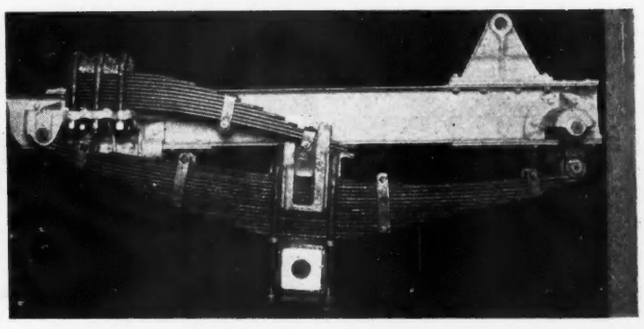
In the New Orleans job three cabinets are provided and the entire width is occupied by one bed which folds up against the side when not in use. It accommodates two patients. As the bed does not run the full length of the body sufficient room is provided for two doctors' seats at the rear. The driver's seat is single, allowing space at the side for luggage. A folding step is provided at the rear. Side lights are installed for illuminating house numbers when passing through the streets at night.

This 18-ft. van body (Fig. 4) is mounted on the Mack six-cylinder chassis frame without cross members or sills by the use of bus type outriggers furnished with the chassis. The floor is double planked of white oak with lengthwise planking on top. Haskelite is used in panels, ash for uprights and roof bows, while the roof is wainscoting covered with water-proof duck. There is a 36-in. base panel inside with 4-in. slats above. Rear of the body is provided with a 30-in. tailgate with double rear doors above. Bus type rear fenders are used and they are covered by metal wheelboxes. Width is 6 ft. 9 in. and height 7 ft.

The cab is a custom built Mack job with a hardwood frame covered with aluminum. It is streamlined with the hood, a special cowl being provided for this purpose. There are four cowl ventilators, two at the top and one on each side. The driver's seat is set forward of the other seat and has a compartment in back of it. The seats are of grey Spanish leather and the interior is lined with imitation leather to match. The apron is extended to the rear of the cab and a 3-in. guard rail extends the full length of the body.

Hug Cushion Spring

Multi-Cushion rear spring assembly used in the Hug Model 87 chassis described in April issue comprises a semi-elliptic main spring and a quarter-elliptic helper spring. The front bracket supports the front bolt and the forward end of the helper spring. A casting attached to the semi-elliptic spring by two U-bolts passes around the end of the helper spring. As the load increases point of contact of helper spring moves forward on the casting.



Spring Assembly of Hug Model 87

LEMPCO
WORMS AND GEARS

Lempco Gun-Alloy Brake Drums are now ready for all popular types of buses and trucks.

Lempco Axle Shafts are made to fit practically every passenger car, bus, truck and taxicab in operation.

"A Perfect Match— It's a Lempco Set, of Course!"

"Whenever I see the Lempco mark on a worm and gear set," said a maintenance man, "I'm safe to assume that it's a perfect match. I never saw a Lempco Worm and Gear set that wasn't perfectly matched."

Every Lempco worm and gear has a standard to meet in quality of materials, workmanship and perfect fit. No set that doesn't meet this standard can get by the inspection room, where precision instruments detect the slightest flaw. This is not an idle promise; it is a *written* guarantee that protects you any time before or after installation of a Lempco Worm and Gear.

Wherever you may be, there is a dependable Lempco jobber near you who can supply you, *in a hurry*, with a worm and gear set for any type of bus, truck or taxicab in operation.

Write for the name of the nearest Lempco jobber

LP
LEMPCO PRODUCTS

The Lake Erie Metal Products Co. Bedford, O.

BRANCH OFFICES AND WAREHOUSES:

New York	Chicago	San Francisco	Atlanta, Ga.	Dallas, Texas	Export Dept.
160 West 62nd St.	Wabash Ave. at 21st St.	625 Gough St.	279 Ivy St.	2705 Williams St.	8-10 Bridge St. New York, N. Y.

CREATES PROSPECTS

(Continued from page 23)

fect in the purchase contract form.

The want ad reproduced in this article was used for procuring the first contract-hauler for the aforementioned creamery, operator of nine trucks. A good many conferences between Jarvis and the creamery manager were necessary before the latter was sold on the idea. After the first sale this company gradually agreed to displace all its own trucks for new driver-owned trucks.

Only recently Jarvis sold the idea of a country route to a baker who previously had confined his business entirely to the city. Jarvis advertised and found the man who would buy a new truck for running the route. In view of the success of the initial sale the baker has since been bent upon establishing a number of other country routes, to extend his business and expand his annual profits. Local oil companies also have been sold on the idea and driver-owned trucks bought of the O'Brien-Davis company are, as a result, making regular trips over the country.

It is mainly to the farmers that the trucks are sold for completing the Jarvis idea. Experience proved that the farmers or their sons have the money to make the necessary payments, whereas young men about town can seldom make the grade.

"Nearly all of the applicants to the little ads are from the country," explained Barnum, "and they sometimes come from many miles away, even from two or three counties removed from Fremont. The farmer has the desire to set his son up in business, or the son has enough money saved for the venture on his own responsibility. Aside from keeping after the prospects that the little want ads bring into the branch, Barnum and his lone truck salesman closely watch all farm sales advertised. These sales mean ready money and probably the desire to get into some other line. Even though a sale may only mean retirement of the farmer from active farming, he may desire that his unmarried son be established in some useful occupation after moving to town, and upon that is based the possibility of another truck sale."

Quite often applicants come to the O'Brien-Davis branch in response to advertising to find that they lack sufficient cash for the down-payment stipulated in the hauling contract. But they are ripe prospects for used trucks for use in other lines, there being business concerns which have no objection to used trucks—coal dealers, for example, as well as others, are good prospects for Jarvis' owner-driver idea.

Some of the men replying to the ads are not even able to make a small down-payment on a used truck, but they are not turned away without encouragement. They are asked to leave their names in event the company learns of an opening for a driver. Since the driver-owner idea was originated operators have come to look to the O'Brien-Davis Co. as a source of driver supply and requests for good drivers have not been infrequent. Jarvis feels that a good driver is always a good future prospect, who, when he has saved enough money, will want to own his truck.

Courthouse records represent another fertile source from which Jarvis develops prospects. He follows them up very closely. For example, he notices that a farmer has bought a lot of cattle and gives his bank a mortgage on them. Later he observes that this mortgage has been released, which means that the cattle have been returned to the market, presumably at a fair profit to the farmer. If at that time the farmer is a logical prospect for a truck, that is the time when he should be solicited, and Jarvis immediately takes up the trail. Many of Jarvis' sales are directly traceable to these records.

Diamond T 3-Ton

(Continued from page 47)

mounted at the rear of the master cylinder.

A heat treated chrome nickel steel frame reinforced by steel side plates is employed. It incorporates six cross members, two of which are tubular. Springs are semi-elliptic and alloy steel with front springs shackled in front. A combined pressed steel cowl, dash and instrument panel is standard construction.

Standard equipment includes generator, starter, battery, head and tail lights, chromium plated spring bar bumper, governor, oil filter, air cleaner, speedometer, horn, spare wheel and tire carrier. A new cab has been designed for this model providing driver comfort, weather protection and improved vision. It can be converted to an open vestibule type if desired.

Railroad Uses of Trucks

(Continued from page 20)

This is largely because each merchant or trader sends a truck to terminal stations to deliver or receive his freight. Waiting lines thus created mean loss of both time and money. Most of these trucks carry only partial loads, some merely a case or two, but they all add equally to traffic congestion in the terminal district.

Store-door delivery by truckmen operating under contract with the carriers reduces the number of trucks required to less than half. No arrival notice to the consignee is necessary. Inbound freight consequently does not wait hours or even days for the consignee's trucks, but is moved out immediately as received.

Timken Tandem Drive

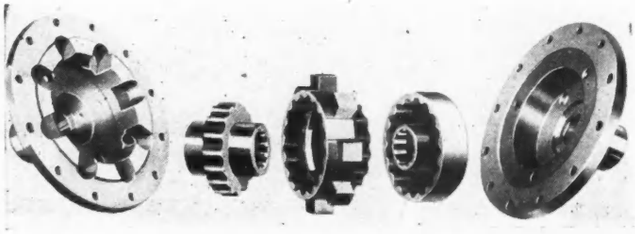
(Continued from page 39)

beyond the innermost bearing, held in place by the same pin that holds the retaining and locating collar on the trunnion tube. Bronze thrust washers are placed between the various journals to be lubricated, with seal rings over the outside. Another difference between these axles and the standard type is found in the housing, which is made special since the springs do not attach to the housing; torque bosses for the rods must be provided; and because the SW axles are made lighter and have a wider track.

The units are offered in any conventional gear ratio and for either radius rod or Hotchkiss mounting.

Krohn Differential Expands

Plans are being made by the Krohn Differential Corp., Chicago, to expand its plant and to increase sales in the original equipment as well as in the replacement fields. This differential, it will be recalled, was introduced in 1924 and consists of three working parts, which are shown disassembled in the accompanying illustration. The halves of the case are at the right and left. A ring gear is mounted on the case, just as with any differential, and the rotation of the case is imparted to a central internal-external gear. This, in turn, drives to an internal gear on one side and an external on the other. Any required amount of locking action is obtained by a difference in the number of teeth in the various gears. This allows rotation of one driving wheel with respect to the other when rounding corners, but does not allow spinning when one wheel loses traction.



Disassembled view of the Krohn differential. Note the internal-external gears

Commercial Car Specifications—Corrected Monthly

The Specifications, Chassis Prices, Etc., Are Corrected Each Month From Data Supplied Direct by the Makers. Gasoline Tractor-Trucks Will be Found at the End of Gasoline Commercial Cars

Those Chassis Which Are Sold and Recommended for Bus Use Are Designated in the Following Table by Reference Sign (§) in Front of the Name

* Changes
† New Models

For Motor Bus Chassis See Pages 76 and 77

(Where prices are not given it is because we have been unable to get them from authoritative sources)

Key of abbreviations, page 78

Trade Name and Model	General: Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
1000 Pounds																																
*Chevrolet Int. Com	400	107	107	B 4.50/20	B 4.50/20	Own	6-3 1/8 x3 3/4	26.3	H	PG	Non	Har	Car	P	D-R	D-R	P. Own	Own Int.	U	3	Own	Own Int.	S	1/2	3.82	12.68	E*	Own Int.	Own	.....	26 5/8	1825
†Dodge Brothers	545	109	109	B 29x4.75	B 29x4.75	Own	4-3 3/8 x4 1/4	21.0	L	PC	Non	MeC	Car	V	D-R	N-E	P. Roc	Own	U	3	Own	Own	S	1/2	4.7	14.28	G*	Own	Gem	.....	.....	1900
Durant Com. Ch	495	107	.....	B 28x4.75	B 28x4.75	Con	4-3 3/8 x4 1/4	18.2	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	A	3	Spi	Own	S	1/2	4.87	16.16	E*	Own	Own	.....	.....	1650
*Fargo Packet	595	.....	.....	B 4.75/20	B 4.75/20	Own	6-3x4 1/2	21.6	L	FP	Non	Own	Car	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	4.7	.....	E†	Own	.....	.....	.....	1835
General Motors T-11	625	109 5/8	.....	B 5.00/19	B 5.50/19	Pontiac	6-3 1/8 x3 7/8	26.3	L	PC	Non	Lon	Mar	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	4.42	14.67	E*	Own	Jac	.....	.....	1885
Reo Speed Wagon Jr.	895	115	.....	B 28x5.25	B 28x5.25	Con 16E	6-3 3/8 x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E	P. B&B	W-G	U	3	Spi	Sal	S	1/2	4.7	14.63	E†	Sal	Ros	.....	.....	2290
Stud. Erskine 52B	675	109	.....	B 30x5	B 30x5	Con 9F	6-2 3/4 x4 1/2	18.2	L	PC	Non	Lon	Sch	V	D-R	D-R	D. Lon	W-G	U	3	Spi	Tim	S	1/2	5.12	15.6	H*	Tim	Gem	.....	.....	.....
1500 Pounds																																
Dodge Brothers	775	120	120	B 31x5.25	B 31x5.25	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spl	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2510
Dodge Brothers	830	120	120	P 30x5	P 30x5	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2630
Dodge Brothers	790	120	120	P 33x4 1/2	P 33x4 1/2	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2535
Fargo Clipper	595	.....	.....	B 5.50/18	B 5.50/18	Own	6-3 1/2 x4 1/4	23.4	L	FP	Non	Own	Str	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	.....	.....	E†	Own	.....	.....	.....	3175
Int. Harvester Spec. Del.	.....	124	124	B 30x5.25	B 30x5.25	Wau XA	4-3 1/2 x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	Roc	M.M.	U	3	M-M	Eat 502	S	1/2	4.45	15.1	H*	Eat 200F	Ros	86 5/8	50 5/8	2200
Kleiber	1170	121	.....	B 30x5.50	B 30x5.50	Con	6-2 7/8 x4 3/4	19.8	L	PC	Non	Fed	Str	V	D-R	D-R	B-L	B-L 20	U	3	Spi	Tim 52604	B	1/2	4.9	.....	H	Tim 11703H	Ros	84	86	2400
Rugby Fast Mail	725	110	.....	B 29x5.00	B 29x5.00	Con	6-2 7/8 x4 3/4	19.8	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	U	3	Spi	Own	S	1/2	4.45	14.8	E*	Own	Own	.....	.....	1760
Sanford S	.....	120°	130	P 30x5	P 30x5	Con 31L	6-2 7/8 x4 3/4	19.8	L	PC	Non	Fed	Str	V	D-R	D-R	D. B-L	B-L 20	U	3	Blo	Eat	B	1/2	5.37	22.3	G	Eat	Ros	78 1/2	35 3/4	2550
Stewart Buddy	895	118	118	B 30x5.50	B 30x5.50	Lyc	6-2 7/8 x4 3/4	19.8	L	PC	Non	Own	Str	V	D-R	D-R	D. Own	Own	U	3	Own	Own	S	1/2	5.6	17.3	A	Own	Gem	77 1/8	40 1/8	2694
Velie	1165	112	112	B 30x5.25	B 30x5.25	Own	6-3 1/16 x4 1/4	24.4	H	FP	.....	.....	Str	V	A-L	A-L	P. B&B	Roc	U	3	Cle	Own	S	1/2	4.9	.....	F	Own	Ros	54	34	2352
1 Ton																																
Acme 14	.....	125	.....	P 30x5	P 30x5	Con H8	4-3 3/8 x4 1/4	18.2	L	PC	Non	Per	Til	V	A-L	A-L	P. B&B	W-G	U	3	Blo	Cla B365	S	1/2	5.66	20.1	A	Sal F	Ros	96	47	2650
Acme 16	.....	125	.....	P 30x5	P 30x5	Con 29L	6-2 7/8 x4 3/4	19.8	L	PC	Non	Per	Til	V	A-L	A-L	P. B&B	W-G	U	3	Blo	Cla B365	S	1/2	5.66	20.1	A	Sal F	Ros	96	47	2650
Acorn 20P	1185	132	.....	B 32x6.00	B 32x6.00	Con 15C	6-3 3/8 x4 5/8	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful DU10	U	3	Spi	.....	B	1/2	4.5	.....	.....	.....	Lav	.....	.....	3500
Betz J3	.....	140	Opt	P 32x6	P 32x6	Bud WTU	4-3 3/4 x5 1/8	22.5	L	PC	Mon	Chi	Zen	V	Bos-A	A-L	D. Ful	Ful	U	3	Pet	Tim	B	F	.....	.....	E	Tim	Ros	.....	.....	3250
Betz J3-6	.....	153	.....	P 32x6	DP32x6	Bud HS6	6-3 3/8 x4 1/2	27.3	L	PC	Mon	Chi	Zen	V	A-L	A-L	D. Ful	Ful	U	3	Pet	Tim	B	F	.....	.....	E	Tim	Ros	.....	.....	3500
Biederman	.....	138	.....	P 30x5	P 30x5	Con 8R	6-3 3/8 x4 1/2	27.3	L	PC	Non	Own	Zen	G	D-R	A-L	D. B-L	B-L 31	U	3	Spi	Cla	B	1/2	5.5	27.	A†	Shu	Ros	92	.....	3200
Clydesdale 16	.....	140	.....	P 34x5	P 34x5	Con S4	4-4 1/4 x4 1/2	28.9	L	FP	Non	Own	Zen	V	Bos-A	Bos-A	D. B-L	B-L 31	U	3	Spi	Tim 5620	B*	F	6.43	30.86	A	Tim 1250	Ros	.....	.....	3450
Commerce 20Y	1600	142	.....	P 30x5	P 30x5	Bud HS6	6-3 3/8 x4 1/2	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Col 54028	S	F	5.1	25.5	E	Col 5530	Han	103 1/2	63	3900
*Day-Elder MF	1345	131	131	P 30x5	P 30x5	Con 16C	6-3 3/8 x4 5/8	27.3	L	FP	Non	G&O	Zen	V	D-R	D-R	D. B-L	B-L 20A	U	3	Spi	Tim 52000H	B	F	5.83	25.14	A	Tim 11703H	Ros	103 1/2	56	3100
Denby 41	.....	128	.....	P 34x5	P 34x5	Her O	4-4x5	25.6	L	PC	.....	Lon	Zen	G	A-L	A-L	D. Ful	Ful	U	3	U-P	Col 54005	S	3/4	5.8	23.2	.....	Con	Ros	.....	.....	3315
Diamond T151	1095	132	.....	P 30x5	P 30x5	Con 18E	6-3 3/4 x4	27.3	L	PC	Non	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	3	Spi	Col	S	1/2	5.12	18.6	G†	Col 3203	Ros	96	.....	3200
Dodge Brothers BE	995	130	130	P 30x5	P 30x5	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.1	23.76	G†	Own	Han	85 3/4	49 3/4	2920
Dodge Brothers, BEW	1030	130	130	P 33x5	P 33x5	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.67	26.40	G†	Own	Han	85 3/4	49 1/2	2950
Dodge Brothers IEF	1110	140	140	P 32x6	P 32x6	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.7	26.40	G†	Own	Han	95 1/4	59 3/4	2995
Dodge Brothers BEF	1040	130	130	P 32x6	P 32x6	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.7	26.40	G†	Own	Han	85 3/4	59 3/4	2965
Dodge Brothers IE	1065	140	140	P 30x5	P 30x5	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.1	23.76	G†	Own	Han	95 1/4	59 3/4	2955
Dodge Brothers IEW	1100	140	140	P 33x5	P 30x5	Own	6-3 3/8 x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.67	26.40	G†	Own	Han	95 1/4	59 3/4	2985
†Eagle 6-10	.....	130	.....	P30x5	P 30x5	Con 18E	6-3 3/8 x4	27.3	L	PC	Opt	Per	Zen	V	A-L	A-L	D. Cov	Cov JUC	U	3	Pet	Tim 52000H	B	F	.....	.....	G	Tim 11703H	Ros	.....	.....	3000
†Fargo	795	135	.....	B 5.50/20	P 32x6	Own	6-3 1/2 x4	23.4	L	.....	Non	Own	Str	V	D-R	D-R	.....	.....	U	4	U-P	Cla	.....	1/2	5.67	.....	E†	.....	Han	96	49	.....
*Federal 3F6	.....	127	139	P 30x5	P 30x5	Con 34L	6-2 7/8 x4 3/4	19.8	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	U	3	Pet	Cla B364	B	1/2	6.38	23.27	G†	Cla F208	Gem	95	51	2800
*Federal 3FW	.....	127	139	P 30x5	P 30x5	Wau XA	4-3 1/2 x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	U	3	Pet	Cla B364	B	1/2	6 38	23.27	G†	Cla F208	Gem	95	51	2725
Fisher Jr. Express	.....	140	140	P 30x5	P 30x5	Con 31L	6-2 7/8 x4 3/4	19.8	L	FP	Non	Lon	Zen	V	A-L	A-L	. Lon	M.M L U	U	4	Blo	Tim 52000H	S	1/2	5.83	. .	E	Tim 11703H	Ros	108	73 3/8	.....
Garford 20Y	1600	142	.....	P 30x5	P 30x5	Bud HS6	6-3 3/8 x4 1/2	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Col 54028	S	F	5.1	25.5	E	Col 5530	Han	103 1/2	63	3900
General Motors T-19	895	127 3/4	145 3/4	P 5.50/20	P 32x6	Pontiac	6-3 1/8 x3 7/8	26.3	L	PC	Non	Lon	Mar	P	D-R	D-R	.....	Own	U	4	Own	Own Tim 5261H	S	1/2	6.14	34.11	E*	Tim 11710N	Jac	.....	.....	2800
Gramm 263N	1485	133°	174	P 30x5	P 32x6	Lyc S	6-3 1/4 x4 1/2	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1002	S	1/2	5.66	22.6	A*	Col 5300	Ros	97	57 5/8	3585
Gramm-Bernstein 10	.....	129	146	P 30x5	P 30x5	Lyc CT	4-3 3/4 x5	22 5	L	PC	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Pic	Sal A	B	3/4	5.85	23.08	B*	Sal D	Ros	97	57 1/2	3020
Hahn 5J4	.....	138	138	P 30x5	P 30x5	Her O	4-4x5	25.6	L	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 30	U	3	Pet	Eat 1002	S	1/2	5.33	21.8	A	Eat 750	Ros	103	63 1/2	3100
Hahn 5J6	.....	138	144	P 30x5	P 30x5	Bud HS6	6-3 3/8 x4 1/2	27.3	L	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 30	U	3	Pet	Eat 1002	S	1/2	5.33	21.8	A	Eat 750	Ros	103	66	3200
Indiana 200	.....	137	137	P 30x5	P 32x6	Wis F	6-3 1/4 x4 1/4	25.3	H	PC	Non	Lon	Zen	V	A-L	A-L	P. B&B	B-L 20A	U	3	Spi	Col 36000	B	1/2	5.12	21.3	G*	Col 3200	Ros	96	56	3435
Int. Harv'tr 6 Sp. Spec	.....	124	124	P 30x5	P 30x5	Wau XA	4-3 1/2 x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	. Roc	M.M.	U	3	M.M.	Eat 1124*	S	1/2	5.29	52.6	H*	Eat 430F	Ros	86 5/8	50 5/8	2430
Kissel	.....	140	.....	P 34x5	P 34x5	Own	4-3 7/8 x5 1/2	24.1	L	SP	Non	McC	Str	V	D-R	D-R	D. W-G	W-G T38L	U	3	Spi	Tim 6258	W	F	5.16	18.88	A*	Tim 1452	Ros	.....	.....	3780
Kleiber	1450	140	140	P 30x5	P 30x5	Con	6-3 5/8 x4	27.3	L	PC	Non	Own	Str	G	D-R	D-R	D. B-L	B-L 20	U	3	Spi	Tim 5260	B	1/2	5.36	.....	B†	Tim 12307	Ros	100	64	3000
Larrabee 20	.....	143	160	P 30x5	P 30x5	Con 16C	6-3 5/8 x4 5/8	27.3	L	PC	Non	Pet	Zen	G	D-R	D-R	D. B-L	B-L	U	3	Spi	Col	B	1/2	.....	.....	E†	Col	Ros	96	54 1/8	3745
*Le Moon H10	1500	130	140	P 32x6	P 32x6	Con 16C	6-3 5/8 x4 5/8	27.3	L	FP	Non	Chi	Str	G	D-R	DJ	D. B-L	B-L 20	U	3	Spi	Cla B365	B	1/2	5.6	18.7	B	Tim 12300	Ros	96	66	3000

Trade Name and Model	General					Engine								Electrical System		Clutch	Gearset			Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase		Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds	Universals (Make)	Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low				Cab to rear of frame	Cab to rear axle	
1 Ton—Cont'd																															
Luedinghaus		130	172	P 30x5	P 30x5	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	G	Eis	A-L	D. Ful	Ful SU10	U	3		Tim 5260	B	½			A*	Shu 5410	Ros	120	72	2850
Relay 20B	1700	142		P 30x5	P 30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Own 20	R	F	5.14	25.7	E	Col 5530	Han	103½	63	4100
Reo DA	995	123	138	P 30x5	P 30x5	Con 16E	6-3⅜x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E	P. B&B	W-G	U	3	Pet	Own	S	½	5.22	18.47	E†	Own	Ros			2755
Reo DC	1075	138		P 30x5	P 30x5	Con 16E	6-3⅜x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E	P. B&B	W-G	U	3	Pet	Own	S	½	5.22	18.47	E†	Own	Ros			2850
Rugby Exp	975	128		P 30x5	P 30x5	Con	6-2¾x4¾	18.2	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	A	4	Spi	Sal	S	½	5.39	22.4	E*	Sal	Gem			2510
Sanford A		130°	140	P 30x5	P 30x5	Con 31L	6-2⅞x4¾	19.8	L	PC	Non	Fed	Str	V	D-R	D-R	D. B-L	B-L 20	U	3	Blo	Eat	B	½	6.37	26.46	H	Eat	Ros	86¾	47	2930
Service 20Y	1600	142		P 30x5	P 30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Col 54028	S	F	5.1	25.5	E	Col 5530	Han	103½	63	3900
Stewart Buddy	995	128	138	P 30x5	P 30x5	Lyc	6-2⅞x4¾	19.8	L	PC	Non	Fed	Str	G	D-R	D-R	D. W-G	W-G	U	3	Spi	Sal	S	½	5.6	17.1	G*	Own	Gem	89¼	50¾	2806
Studebaker GD-N	1075	140		P 30x5	P 30x5	Own	6-3⅜x4½	27.3	L	PC	Non	Lon	Str	O	D-R	D-R	P. Lon	Own	U	3	Spi	Own	S	½	4.64	13.7	G*	Own	Ros	90⅜	62⅜	2860
United 16		122½		P 32x4½	P 32x4½	Wau X	4-3½x4½	19.6	L	PC	Non	Per	Zen	G	A-L	A-L	P. B&B	W-G T 71	U	3	Blo	Cla B-365	S	½	5.66	17 0	A	Shu 5400	Ros	96	57	2400
United 16C		122½		P 32x4½	P 32x4½	Con 29L	6-2⅞x4¾	19.8	L	PC	Non	Per	Til	V	A-L	A-L	P. B&B	W-G T 71	U	3	Blo	Cla B-365	S	½	5.66	17.0	A	Shu 5400	Ros	94	55	2500
§U. S. U	1850	138	162	P 34x5	P 34x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Cla B-501	B	½	6.25	30.0	A*	Shu 350	Lav	108	70	3400
Wachusett S		152	152	S 34x5	S 34x5	Con 8R	4-3¾x5⅛	27.3	L	PC	Non	G&O	Zen	V	Bos-A	Bos-A	D. B-L	B-L 30	U	3	Spi	Tim 5511	W	¾	5.5	22.5		Tim 1250	Ros	120	84	3300
White 15B	1545	133½°	150	P 30x5	P 30x5	Own GKA	4-3¾x5⅛	22.5	L	PG	Non	Own	Zen	V	L-N	L-N	P. Own	Own 15	A	4	Spi	Own 15B	S	½	5.36	18.6	A*	Own 15	Own	96⅞	57¾	3242
White 60	1850	138°	157	P 30x5	P 30x5	Own 2A	6-3½x4½	29.4	L	FP	Non	Own	Zen	V	D-R	D-R	P. Own	Own 3B	U	3	Spi	Own 4C	S	½	4.72	17.84	G†	Own 4D	Han	112	58¾	3562
Willys Knight T-100		130	130	P 30x5	P 30x5	Own	6-2⅛x3⅞	20.7	X	FP	Non	Own	Til	V	A-L	A-L	P. B&B	W-G	U	3	M.M.	Tim 5260	S	½	6.14	26.22	E*	Own	Own	91	51	2700
1¼ Ton																															
Atterbury 26B		132	132	P 30x5	P 30x5	Lyc S	6-3¼x4½	25.3	L	PC	Non	Fed	Zen	G	A-L	A-L	D. B-L	B-L	U	3	Blo	Cla	B	½	5.6	18.7	A*	Shu	Gem	98½	55	3350
Biederman		154	154	P 32x6	P 32x6	Con 8R	6-3¾ 4¾	27.3	L	PC	Han	Own	Zen	G	D-R	A-L	D. B-L	B-L 31	U	3	Spi	Cla	B	½	7.2	35.0	A*	Shu	Ros	104		3600
Brockway Junior		130	130	P 30x5	P 30x5	Wis C	4-3¾x5	22.5	L	PC	Non	G&O	Zen	V	A-L	A-L	P. B&B	B-L 20	U	3	Spi	Col 36001	B	½	5.12	20.84	G*	Col 3204	Ros	96	56	3100
Brockway JF		137		P 30x5	P 30x5	Wis F	6-3¼x4¼	25.3	H	PC	Non	G&O	Zen	V	A-L	A-L	P. B&B	B-L 20	U	3	Spi	Col 36001	B	½	5.12	20.84	G*	Col 3205	Ros			3450
Clinton 20B		150	Opt.	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Per	Zen	V	Spi	D-R	D. B-L	B-L 31	U	3	Blo	Cla B501	B	½	6.28	29.5	A*	Shu 5405	Ros	Opt.	Opt.	3750
Clydesdale 10A		154°		P 34x5	P 34x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Own	Zen	V	Bos-A	Bos-A	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A*	Tim 1250	Ros			3250
Corbitt 620		137	150	P 32x6	P 32x6	Con 18E	6-3⅜x4	27.3	L	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 20	U	4	Spi	Tim 52000H	S	F	5.83	29.15	G†	Tim 11703H	Ros	108	64	3380
Fageol 100	1300	156°	168	B 32x7.00	B32x7.00	Wau XA	4-3½x4½	19.6	H	PC		Lon	Zen	V	D-R	D-R	D. B-L	B-L 20	U	4	Spi	Tim 52000	B	F	5.57	27.85	G	Tim 11703H	Ros	120	85½	3675
Gotfredson B24		131	160	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	McC	Zen	V	D-R	D-R	P. B&B	B-L 20A	U	3	Spi	Tim 52000H	B	½	5.83	24.19	G	Tim 11704H	Ros			3200
Gramm 263 N	1485	133°	174	P 30x5	P 32x6	Lyc S	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1002	S	½	5.66	26.6	A*	Col 5300	Ros			3585
Gramm Bernstein 10		129	146	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Pic	Sal A	B	¼	5.85	23.4	B*	Sal D	Ros	97	57⅜	3020
Indiana 11X		120	120	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L	P. B-L	B-L 31	U	3	Spi	Cla B365	S	½	5.1	24.48	A	Shu 5405	Ros	52⅜	44½	3350
Indiana 11		129½°	165½	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L	P B&B	B-L 31	U	3	Spi	Cla B365	S	½	5.1	24.48	A	Shu 5405	Ros	99	54⅜	3500
Int. Harvester S-24		130		P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	3	M.M	Eat 1002	S	½	5.33	21.3	H*	Eat 430F	CAS	94	51½	3200
Int. Harvester S-26		130		P 30x5	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	G	D-R	D-R	P. Lon	Own	U	3	M.M.	Eat 1002	S	½	5.33	21.3	H*	Eat 430F	CAS	94	51½	3250
Master 11		132		P 35x5	P 35x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Chi	Zen	G	Bos-A	Bos-A	D. Ful	Ful SU	U	3	Spi	Cla	S	½	5.5	22.0	A	Tim	Ros			3000
*Moreland Ace	1275	134	134	B32x6.75	B32x6.75	Con 34L	6-2⅞x4¾	19.8	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 20	U	4	Cle	Tim 52000H	S	F	5.83	29.17	G†	Tim 11703H	Ros	104	56	3000
Republic 75-6		128½		P 30x5	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21.3	A*	Eat	Han	98	53¼	3150
Republic 75		124°		P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21.3	A*	Eat	Han	98	53¼	3000
Sanford S		120	130	P 30x5	P 30x5	Con	6-2⅞x4¾	19.7		FP	Non	Own	Str	P	D-R	D-R	D. B-L	B-L	U	3	Blo	Eat	B	½	5.38	17.5	E*	Eat	Ros	75½	35½	2900
Selden Pacemaker 25		142°		S 30x5	S 30x5	Con S4	4-4¼x4½	28.9	L	PC	Non	Own	Str	G	D-R	D-R	D. B-L	B-L 31	U	3		Cla	B	½			A*	Shu	Ros			4300
Sterling DB7		137°		P 32x6	P 32x6	Con 18E	6-3⅜x4	27.3	L											4	Spi	Own					E	Own				
Stewart 16	1295	130	160	P 32x6	P 32x6	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Str	G	D-R	D-R‡	D. Ful	Ful SU-1	U	4	Spi	Cla B-365	S	¾	5.6	22.0	G	Col 3008	Gem	95¼	48½	3326
Stewart 16X	1295	130	160	P 32x6	P 32x6	Lyc	6-3¼x4½	25.3	L	FP	Non	Own	Str	G	D-R	D-R	D. Ful	Ful	U	4		Cla	S	½	5.6	22.0	G*		Ros	94¾	48½	3326
United 20		128		P 30x5	P 30x5	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	A-L	A-L	D. B-L	B-L 20B	U	3	Blo	Cla B-365	B	½	5.66	17.00	A	Shu 5400	Ros	95½	52¾	2900
United 20C6		128		P 30x5	P 30x5	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per		V	A-L	A-L	D. B-L	B-L 20B	U	3	Blo	Cla B-365	B	½	5.66	17.00	A	Shu 5400	Ros	91¾	48½	2900
Valley	1295	132	142	P 33x5	P 33x5	Her	4-4x5	25.6		FP	Non	Har		V	D-R	D-R	D. Ful	Ful	U	3	Own	Own			4.46	Opt		Own F				
Victor 30	1595	131	180	P 30x5	P 30x5	Con 18E	6-3⅜x4	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Cov	Cov JUC	U	3	U-M	Tim	S	¾	5.1	20.4	G†	Tim	Ros			3000
White 57	2725	146°	157½	P 32x6	P 32x6	Own GRC	4-4x5¾	25.6	L	FP	Own	Own	Zen	V	L-N	L-N	P. Own	Own GRBB	U	4	Spi	Own 57	S	½	4.67	19.3	A*	Own 57	Own	100⅞	62⅞	3774
Woods 20B4		129	129	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Per	Zen	V	D-R	D-R	D.B-L	B-L	U	4	Blo	Tim	S	½	5.57		A*	Shu	Ros	90	53	
Woods 20B6		129	129	P 30x5	P 30x5	Con 31L	6-2⅞x4¾	19.8	L	PC	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L	U	4	Blo	Tim	S	½	5.57		A*	Shu	Ros	90	53	3050
1½ Ton																															
Acme 24		144		P 30x5	P 30x5	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.2	A	Col 5400	Ros	102⅝	66⅝	3450
Acme 26		144		P 30x5	P 30x5	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.2	A	Col 5400	Ros	102⅝	66⅝	3450
Acorn 30	2300	144		S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	Bos-R		D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt.	Opt.	A	Shu 350	Ros			4400
Acorn 30-P	2300	144		P 30x5	DP30x5	Con 15C	6-3⅜x4⅝	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful SU 12	U	3	Spi	Cla B365	S	½	Opt	Opt	A	Shu 350	Ros			
§Armleder 30		148°	187	S 34x4‡	S 34x6‡	Her OX	4-4x5	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅝	4400
Armleder 30B		150°	188	S 34x4‡	S 34x6‡	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅝	4400
Armleder 30-6		153°	192	S 34x4‡	S 34x6‡	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅜	4500
Atterbury 26G4		145	160	P 30x5	DP30x5	Lyc C4	4-4x5	25.6	L	PC	Non	Fed	Zen	G	A-L	A-L	D. B-L	B-L	U	4	Spi	Tim	B	F	6.4	21.4	A*	Shu	Gem	120	68	4260
Atterbury 26G6		145	160	P 30x5	DP30x5	Lyc 4S	6-3¼x4½	25.3	L	PC	Non	Fed	Zen	G	A-L	A-L	D. B-L	B-L	U	4	Spi	Tim	B	F	6.4	21.4	A*	Shu	Gem	120	68	4260
*Autocar SA	2700	150	192	P 32x6	P 32x6	Own	6-3⅜x4½	33.7	L	PC	Non	Per	Zen	V	L-N	L-N	P. Lon	B-L 35	U	4	Spi	Own SA	S	F	5.22	27.92	H	Tim 14703	Ros	115¼	63⅝	4400
Bets F3		140	Opt	S 34x5	S 34x6	Bud WTU	4-3¾x5½	22.5	L	PC	Non	Chi	Zen	V	Bos-A	A-L	D. Ful	Ful	U	3	Pet	Tim	W	F			E	Tim	Ros			4650
Biederman		166°	170	S 34x5	S 34x8	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Own	Zen	G	D-R	D-R	D. B-L	B-L 31	U	3	Spi	Tim	W	½	7.75	38.0	A*	Shu	Ros	140		4600
Brockway CJB		142	142	P 32x6	P 32x6	Wis C	4-3¾x5	22.5	L	PC	Non	G&O	Zen	V	A-L	A-L	P. B&B	B-L 20	U	3	Spi	Col 55001	B	F	5.12	21.2	G*	Col 3204	Ros	111	68	3200
Brockway E		147½°	161	P 32x6	P 32x6	Wis SU	4-4x5	25.6	H	PC	Non	G&O	Zen	V	L-N	L-N	D. B-L	B-L 30	U	3	Spi	Col 55001	B	F	5.12	20.84	G*	Col 5501	Ros	126¼	71¾	3870
Brockway CJBF		149		P 32x6	P 32x6	Wis F	6-3¼x4¼	25.3	L	PC	Non	G&O	Zen	V	A-L	A-L	P. B&B	B-L 20	U	3	Spi	Col 55001	B	F	5.87	21.2	G*	Col 3205	Ros	111	68	3650
Brockway EN		153¾°	169⅛	P 32x6	P 32x6	Wis N	6-3½x4¼	29.7	H	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Col 55001	B	F	5.87	31.6	G*	Col 5502	Ros	124	71	4420
*Chevrolet Utility	545	131		P 30x5	P 30x5	Own	6-3⅛x3⅜	26.3	H	PG	Non	Har	Car	P	D-R	D-R	Own	Own	U	4	Own	Own	S	½	4.88	30.0	E*	Own	Own	86⅝	51¾	2375
Chicago 15A		135°	195	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	FP	Wau	Chi	Zen	G	Apo	A-L*	D. B-L	B-L 35	U	4	Pet	Tim 5622H	B	F	5.37	28.7	G†	Tim 14733H	Ros	Opt	Opt	4800

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Trade Name and Model	General					Engine								Electrical System		Clutch	Gearset			Universals (Make)	Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase		Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds		Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low				Cab to rear of frame	Cab to rear axle	
1½ Ton—Cont'd																															
Willys Knight 15	....	134	165	P 30x5	P 32x6	Own	6-2⅛x4⅜	20.7	X	FP	Han	Own	Til	V	A-L	A-L	P. B&B	Ful DU	U	3	Blo	Eat 1002	S	½	5.66	24.3	E*	Own	Ros	96	56⅜	3300
White 20A	2125	145½°	168	P 34x5	DP34x5	Own GKA	4-3⅜x5⅛	22.5	L	PG	Non	Own	Zen	V	L-N	L-N	P. Own	Own 20A	A	4	Spi	Own 20A	R	½	9.25	32.1	A*	Own 20A	Own	106⅞	69¾	4412
*White 61	....	148°	170	P 30x5	DP30x5	Own 2A	6-3½x4½	29.4	L	FP	Han	Own	Zen	V	D-R	D-R	P. Own	Own 5B	A	4	Spi	Own 7C	S	½	6.33	26.1	G†	Own 7D	Han	115⅞	68⅞	....
Witt-Will NN	2850	144	172	S 36x4	S 36x7	Con S4	4-4¼x5½	28.9	L	PC	Non	Own	Zen	V	Eis	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64600D	W	½	7.25	30.3	A*	Tim 15300	Ros	136⅛	79½	4300
Witt-Will N6	....	Opt	....	....	....	Con 15C	6-3¼x4⅝	25.3	L	PC	Non	Own	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64600D	....	....	....	....	....	Tim 15300	Ros	....	....	....
World D88	....	147½	177½	P 30x5	DP30x5	Lyc	8-2⅞x4¾	26.4	L	PC	Han	Mod	Zen	O	A-L	A-L	P. Lon	Ful	U	4	Blo	Tim	S	F	6.16	37.	F	Shu	Han	118	71	4000
2 Ton																															
Acme 44	....	162	....	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63720	W	F	6.25	33.4	A*	Tim 14703	Ros	132⅝	82⅝	4000
Acme 46	....	162	....	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63720	W	F	7.33	39.2	A*	Tim 14703	Ros	132⅝	82⅝	4000
Acme 340	....	162	....	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Tim 5620	S	F	6.16	29.6	E	Col 5408	Ros	132⅝	82⅝	4000
Acme 346	....	162	....	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Tim 5620	S	F	6.16	29.6	E	Col 5408	Ros	132⅝	82⅝	4000
Acorn 40	2500	144	....	S 36x4	S 36x7	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	Bos-R	.....	D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt	Opt	A	Shu 350	Ros	....	....	4600
Acorn 40P	2600	144	....	P 34x5	DP34x5	Con 15C	6-3⅜x4⅝	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt	Opt	A	Shu 350	Ros	....	....	4800
*Am. La France Chief	3650	192	Opt.	P 32x6	DP32x6	Own	6-3⅜x5	33.7	L	PC	Own	G&O	Zen	V	D-R	D-R	P. B&B	Own	A	4	Spi	Tim 63-700BX	W	F	5.00	24.0	E*	Tim 14703BX	Ros	Opt	Opt	6200
Armleder 40	....	149	187	S 36x4	S 36x8	Her OX	4-4x5	25.6	L	PC	Non	Non	Lon	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	F	7.25	38.8	A*	Tim	Ros	121	72⅝	4600
Armleder 40-6	....	154	200	S 36x4	S 36x8	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	F	7.25	38.8	A*	Tim	Ros	121	72⅝	4800
*Autocar SD	3000	150	192	P 32x6	DP32x6	Own	6-3¾x4½	33.7	L	PC	Non	Per	Zen	V	L-N	L-N	P. Lon	B-L 35	U	4	Spi	Own SD	R	F	6.33	33.86	H	Tim 14703	Ros	115¼	63⅝	4850
Brockway EYW	....	156°	164	P 32x6	DP32x6	Wis Y	6-3⅜x5	27.3	H	PC	K.P.	G&O	Zen	V	L-N	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	6.00	32.1	G*	Col 5503	Ros	117¾	70¾	5090
Brockway S	....	150¼°	164¼	S 34x4‡	S 34x8‡	Wis SU	4-4x5	25.6	H	PC	K.P.	Bus	Zen	V	Eis	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	6.6	35.3	G*	Col 5503	Ros	129	73	5145
Brockway SY	....	151¾°	178⅛	P 32x6	P 34x7	Wis Y	6-3⅜x5	27.3	H	PC	K.P.	G&O	Zen	V	L-N	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	6.6	35.3	G*	Col 5503	Ros	129	76⅝	5100
Chicago 20A	....	135°	195	S 34x4	S 34x7	Wau V	4-4x5	25.6	L	FC	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 63720H	W	F	6.25	33.4	G†	Tim 14703H	Ros	Opt	Opt	4870
Chicago 21A	....	135°	195	P 32x6	DP32x6	Wau XK	6-3⅜x4½	33.7	L	FC	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 63720H	W	F	6.25	33.4	G†	Tim 14703H	Ros	Opt	Opt	5115
*Clinton 45	....	163	Opt.	S 34x4‡	DS34x4‡	Bud KTU	4-4x5¼	25.6	L	PC	Non	Per	Zen	V	Spl	D-R	D. B-L	B-L 35	A	4	Blo	Tim 64600	W	½	7.75	41.5	A*	Tim 15302	Ros	Opt	Opt	4875
Clydesdale 9	....	160°	....	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	FP	Own	Own	Zen	V	Bos-A	Bos-A	D. B-L	B-L 35	U	4	Spi	Tim 64600	W	½	7.75	41.46	A*	Tim 1460	Ros	....	....	4600
Coleman C-25	....	109	144	P 34x7	P 34x7	Bud HS6	6-3⅜x4½	27.3	L	FP	Non	R-T	Str	V	D-R	D-R	D. Ful	Ful GU 12	U	8	Spi	Own	W	F	7.25	139.0	A*	Own	Ros	108	78	5360
Commerce 40Z	3240	168	....	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4900
Concord GX-6	....	163	185	P 32x6	DP32x6	Bud DW6	6-3¾x5	33.7	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Wis 4610	R	F	6.8	36.38	A‡	Tim 15300	Ros	Opt	85	5140
*Corbitt 646	....	150	198	P 32x6	P 34x7	Con 16R	6-4x4½	38.4	H	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 63703H	W	F	7.33	39.23	G†	Tim 14703H	Ros	144	78	4980
*Corbitt 9B6	....	150	181	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 56000H	B	F	5.83	29.15	G†	Tim 14703H	Ros	Opt	Opt	4200
*Day-Elder HF	....	156	186	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Bus	Zen	V	D-R	D-R	D. B-L	B-L 35	U	3	Spi	Tim 63702H	B	F	7.66	49.83	A	Tim 14703H	Ros	158	86½	4300
*Day-Elder HBF	....	156	186	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Bus	Zen	V	D-R	D-R	D. B-L	B-L 35	U	3	Spi	Tim 5622H	B	F	6.83	44.39	A	Tim 14703H	Ros	158	86½	4400
*Diamond T302	1650	157¾°	176	P 32x6	DP32x6	Her WXB	6-3¾x4½	33.7	L	PC	Non	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Cla	S	½	5.66	33.1	G†	Cla	Ros	117½	....	4600
Dixon	2950	146	....	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PS	Non	G&O	Zen	V	Eis	D-R	D. Ful	Ful GU	U	4	Spi	Tim 6462	W	½	7.75	40.0	A	Shu 5550	Ros	....	....	4600
Dodge Brothers	1445	114	114	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	MeC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3725
Dodge Brothers	1445	114	114	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	MeC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3725
Dodge Brothers	1550	114	114	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	MeC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3875
Dodge Brothers	1545	150	150	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	3930
Dodge Brothers	1545	150	150	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	3930
Dodge Brothers	1650	150	150	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	4080
Dodge Brothers	1615	165	165	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4070
Dodge Brothers	1615	165	165	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4070
Dodge Brothers	1720	165	165	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4220
Douglas	....	156°	....	P 32x6	P 34x7	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.9	33.12	A*	Shu 510	Ros	144	84	5100
Douglas	....	168°	....	P 32x6	P 34x7	Bud DW6	6-3¾x5	33.7	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.33	30.38	A*	Shu 510	Ros	144	84	5850
Douglas	....	118	....	P 32x6	P 34x7	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Bos-R	Non	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.33	30.38	A*	Shu 510	Ros	144	84	4500
Duplex S	....	160	....	P 32x6	P 36x8	Bud DW6	6-3¾x5	33.7	L	FP	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L	U	4	Pet	Tim 65600	W	F	6.75	36.2	A*	Shu 5510	Ros	....	....	5600
Fageol 130	1925	156°	172	P 30x5	DP30x5	Wau V	4-4x5	25.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5260	B	F	4.62	22.2	G*	Tim 12300	Ros	128⅞	83½	4500
Fageol 135	2100	162°	196	P 30x5	DP30x5	Wau XL	6-3½x4½	29.4	L	PC	Non	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5620	B	F	4.62	22.2	G†	Tim 12300	Ros	144	83½	4800
*Federal A6	....	151	176	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	A	4	Opt	Cla B510	B	½	6.37	31.87	G†	Cla F304	Ros	119	71	4400
Fisher Mer. Ex	....	146	160	S 34x5	S 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Lon	Zen	V	A-L	A-L	D. Cov	Cov W4C	U	4	Blo	Tim 63720H	W	½	7.33	42 8	A*	Tim 14703H	Ros	120	79	4100
Fisher Mer. Ex	....	146	160	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Lon	Zen	V	A-L	A-L	D. Cov	Cov W4C	U	4	Blo	Tim 5632H	B	½	6.16	36.0	E	Tim 1230–2H	Ros	120	79	3900
F.W.D.H	3300	121	156	P 34x7	P 34x7	Wis SU	4-4x5	25.6	H	PC	.....	Per	Zen	V	Eis	N-E	D. Det	Cot A	A	4	Blo	Own	B	F	7.3	38.0	B	Own H	Ros	112	81	5300
F. W. D. HT	3900	120	....	P 36x8	P 36x8	Wis SU	4-4x5	25.6	H	PC	Non	Per	Zen	V	Eis	N-E	B-L	B-L	A	7	Blo	Own HT	B	F	6.95	84.7	B	Own H	Ros	115	80	6000
F. W. D. H6	3425	133	160	P 34x7	P 34x7	Wau XL	6-3½x4½	29.4	L	PC	Wau	Per	Zen	V	N-E	N-E	D. B-L	B-L 51	U	4	Blo	Own	B	F	6.52	35.0	H	Own	Ros	118	87	5500
Garford 40Z	3240	168	....	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4900
General Motors T-42	1685	136°	164	P 700/20	P 36x8	Buick	6-3⅛x4⅝	26.3	I	PC	Han	Lon	Mar	P	D-R	D-R	.....	Own	U	4	Spi	Own	S	½	6.57	33.38	E*	Own	Jac	....	....	4305
Gotfredson W36	....	165	196	P 32x6	P 34x7	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	McC	Zen	V	D-R	D-R	P. B&B	B-L 31	U	3	Spi	Tim 63721H	W	F	6.25	30.0	G	Tim 14703H	Ros	....	....	4500
G-P 47-4	....	154	174	P 32x6	P 34x7	Lyc C4	4-4x5	25.6	L	PC	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 56000	B	F	6.14	32.8	G†	Tim 14703H	Ros	....	....	4800
G-P 47-6	....	154	174	P 32x6	P 34x7	Lyc TH	6-3½x5	29.4	L	FP	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 56000	B	F	6.14	32.8	G†:	Tim 14703H	Ros	....	....	4800
Gramm 463N	1885	133°	196	P 32x6	P 34x7	Lyc S	6-3¼x4½	25.4	L	PC	Non	Own	Zen	G	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1504	S	½	6.62	62.5	A*	Col 5300	Ros	97	57⅜	3840
Gramm Bernstein 115S	....	149½°	196	P 30x5	P 30x5	Con 15C	6-3⅝x4⅝	27.3	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B504	B	½	6.38	25.52	B*	Shu 5405	Ros	127	73¼	3750
Gramm Bernstein 115	....	146°	160	P 30x5	P 30x5	Lyc C4W	4-4x5	25.6	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B504	B	½	6.38	25.52	B*	Shu 5405	Ros	127	73⅞	3650
Gramm Bernstein B6	....	144	....	P 32x6	DP32x6	Con 16C	6-3⅝x4⅝	27.3	L	PC	Non	You	Zen	V	A-L	A-L	D.Ful	Ful KU10	U	4	Blo	Tim	B	F	5.83	37.89	G†	Tim	Ros	120½	73¾	4590
†Guilder C6	2150	148	168	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Mon	G&O	Zen	V	D-R	D-R	D. B-L	B-L	U	4	Spi	Tim 54000	S	F	Opt	Opt	..	Tim 12703	Ros	....	....	4650
*Guilder E	3150	152	....	S 34x4	S 36x8	Bud KBU-1	4-4x5¼	25.6	L	PC	Pie	G&O	Zen	G	Eis	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65000	R	F	7.75	41.0	A*	Shu 5410	Ros	....	....	5450
Hahn 44	....	150	177½	P 32x6	P 34x7	Her O	4-4x5	25.6	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Eat 1504	B	½	6.3	33.2	A	Shu 5410	Ros	118½	78½	4100
Hahn 46	....	154	177½	P 32x6	P 34x7	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Eat 1504	B	½	6.3	33.2	A	Shu 5410	Ros	118½	78½	4200
Huffman BC	2795	140	....	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	FP	.....	Chi	Zen	V	Eis	.....	D. Ful	Ful SU12	U	3	Spi	Own	W	½	9.66	38.67	A	Shu	Lav	....	....	4160

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Trade Name and Model	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
2½ Ton—Cont'd																														
*Federal T3W	....	148	185	P 32x6	DP32x6	Wau V	4–4x5	25.6	L	PC	Zen	V	D-R	D-R	P. B&B	Own	A	4	Pet	Tim 64600HP	W	½	7.25	36.2	G†	Own	Ros	119	71	5050
†Federal T22	....	115	148	P 32x6	DP32x6	Wau V	4–4x5	25.6	L	PC	Zen	V	D-R	D-R	P. B&B	Own	A	4	Pet	Tim 64600D	W	½	7.25	36.2	A*	Own	Ros	52	....	....
*Federal T8	....	148	185	P 32x6	DP32x6	Con 16C	6–3⅜x4⅝	27.3	L	SP	Zen	V	D-R	D-R	P. B&B	Own	A	4	Pet	Tim 64600H	W	½	7.25	36.2	G†	Own	Ros	119	71	4950
Fisher Heavy Duty	....	156½	190	P 32x6	DP32x6	Con 18R	6–4x4½	38.4	H	SP	Str	V	A-L	A-L	D. Cov	Cov RA D4	A	4	Blo	Tim 58000H	B	F	6.83	42.3	E	Tim 15733H	Ros	120	80	4800
Fisher Heavy Duty	....	156½	190	P 32x6	DP32x6	Con 18R	6–4x4½	38.4	H	SP	Str	V	A-L	A-L	D. Cov	Cov RA D4	A	4	Blo	Tim 65000H	W	F	8.66	53.2	E	Tim 15733H	Ros	120	80	5150
Fisher Heavy Duty	....	156½	190	S 36x8	Bud BUS	Con 18R	6–4x4½	38.4	H	SP	Str	V	A-L	A-L	D. Cov	Cov	A	4	Blo	Tim 65706DH	W	F	8.66	63.0	E	Tim 14703H	Ros	156	97½	7000
Garford 50Z	4415	175	....	S 36x5	S 36x10	Bud KBU-I	4–4x5½	38.4	L	PC	Non	V	D-R	A-L	D. B-L	B-L 51	A	5	Blo	Tim 65706DH	W	F	7.66	40.98	G	Tim 14703H	Ros	....	....	5050
Gotfredson W44	....	165	196	P 34x7	P 34x7	Bud DW6	6–3¾x5	33.7	L	PC	MeC	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 63721H	W	F	6.5	34.78	G	Tim 14703H	Ros	....	....	5000
Gotfredson W46	....	165	196	P 34x7	P 34x7	Bud DW6	6–3¾x5	33.7	L	PC	Pie	V	D-R	D-R	D. B-L	B-L 51	U	5	M.M.	Tim 63721H	W	F	7.80	....	F*	Tim 15733	Ros	....	....	6800
G-P 57-4	....	175	196	P 36x6	P 40x8	Wau 6-KS	6–4x4½	38.4	L	PC	Wau	V	Bos-R	A-L	D. B-L	B-L 51	U	5	M.M.	Tim 65706	W	F	7.80	....	F*	Tim 15733	Ros	....	....	6800
G-P 57-6	2985	150*	196	P 32x6	DP32x6	Lyc TS	6–3⅞x4½	36.2	L	PC	Own	G	Bos-R	A-L	D. Ful	Ful G	U	4	Blo	Wis 6617B	R	F	6.33	30.4	A*	Col 5400	Ros	97	57½	4600
Gramm 56HN	2985	150*	196	S 36x4	DS36x4	Con S4	4–4½x4½	28.9	L	PC	Non	V	Eis	A-L	D. Ful	Ful GU	U	4	Own	Wis	R	F	8.66	41.57	A*	Jbu 5410	Ros	125	76½	5440
Gramm-Bernstein 125	....	144*	166	S 36x4	DS36x4	Con 16C	6–3⅞x4⅝	27.3	L	PC	Non	V	A-L	A-L	D. Ful	Ful KU10	B	4	Tim	Wis 9990T	W	F	5.83	37.89	G†	Tim	Ros	120½	73¾	4590
Gramm Bernstein B6	....	144*	166	P 32x6	DP32x6	Con K4	4–4½x5½	27.3	L	PC	Pie	V	A-L	A-L	D. Ful	Ful GOG	U	8	Blo	Wis 9990T	W	F	8.66	76.6	B*	Shu 5550	Ros	123½	76½	5865
Gramm-Bernstein C	....	144*	166	S 36x4	DS36x4	Con K4	4–4½x5½	27.3	L	PC	Own	V	Eis	A-L	D. Ful	Ful GOG	A	8	Blo	Wis 9990T	W	F	7.75	68.6	B*	Shu 5550	Ros	123½	76½	5920
Gramm-Bernstein C6	....	150*	201	S 36x4	DS36x4	Con 6B	6–3⅞x5	33.7	L	PC	Pie	V	Eis	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5600*	S	F	Opt	Opt	....	Shu 14703	Ros	....	....	5600
†Guilder E6	3150	168	184	P 32x6	DP32x6	Her WXB	6–3⅞x4½	33.7	L	PC	Non	V	D-R	D-R	D. Ful	Ful G7	U	4	Spi	Eat 2252	S	F	6.13	32.74	B	Shu 5550	Ros	128	78	5300
Hahn 56	....	160	199	P 32x6	P 36x8	Con 6B	6–3¾x5	33.7	L	PC	Chi	V	Bos-R	Non	D. B-L	B-L 51	U	4	Spi	Tim 65600D	W	F	7.25	38.7	A	Tim 15302	Ros	128	76	5600
Hahn 54	....	153	192	P 30x4	P 36x8	Her L	4–4½x4½	32.4	L	PC	Zen	V	A-L	A-L	D. Ful	Ful GU	U	4	Spi	Tim 65700D	W	F	9.33	88.6	A*	Tim 15300	Ros	....	....	6900
Harvey WG6	3500	185	185	S 36x10†	S 36x10†	Bud DW6	6–3¾x5	33.7	L	PC	MeC	V	A-L	Non	D. B-L	B-L 55	A	7	Spi	Tim 65700	W	F	9.33	88.6	A*	Tim 15300	Ros	....	....	6950
Harvey WG	3500	150*	185	S 36x5†	S 36x10†	Bud EBU1	4–4¼x5½	28.9	L	PC	MeC	V	Bos-R	Non	D. B-L	B-L 55	A	7	Spi	Wis 1418	R	F	6.86	37.4	A‡	Shu 5550	Ros	205	131	5900
Hawkeye 50-75	....	210*	225	S 36x5†	S 36x8†	Bud BA6	4–4¼x5½	40	L	PC	Non	V	Bos-R	N-E	D. Ful	Ful HU	U	4	Pie	Wis 8800A	R	F	8.6	54.2	A‡	Shu 5550	Ros	179	106	5400
Hawkeye 50-48	....	Opt	185	S 36x5	S 36x8	Bud EBU1	4–4¼x5½	28.9	L	PC	Sim	V	Bos-R	N-E	D. Ful	Ful HU	U	4	Pie	Wis 1418	R	F	8.00	60.2	A‡	Shu 5550	Ros	179	118	5800
Hawkeye 50-60	....	197	197	S 36x5	DS38x7	Bud DW6	6–3¾x5	33.7	L	PC	Per	V	N-E	N-E	D. Ful	Ful HU	U	4	Pie	Tim 65600D	R	F	....	....	A‡	Tim 15300B	Ros	Opt	Opt	5750
Hendrickson ST	3400	....	....	S 36x5	S 36x8	Bud ETU	4–4¼x5½	28.9	L	FP	MeC	V	Spl	A-L	D. Ful	Ful G7	A	4	Pie	Wis 4610	W	F	5.98	19.67	A	Shu 550	Ros	130	75	5645
•Hug 26	....	150	195	P 32x6	P 36x8	Bud DW6	6–3⅜x5	33.7	L	PC	Bud	V	A-L	D-R	D. B-L	B-L 35	U	4	Blo	Wis 8800B	R	F	7.85	42.05	A	Shu 550	Ros	78	57½	5890
Hug 81	....	127	127	P 32x6	P 36x8	Bud KBU-I	4–4x5¼	25.6	L	PC	Bud	V	Eis	D-R	D. B-L	B-L 51	U	4	Blo	Wis 8800B	R	F	7.85	46.85	A	Shu 550	Ros	78	57½	6088
Hug 94	....	127	127	P 32x6	P 36x8	Bud KBU-I	4–4x5¼	25.6	L	PC	Bud	V	Eis	A-L	D. B-L	B-L 51	U	4	Blo	Wis 8800B	S	½	7.85	42.99	B*	Shu 5410	Ros	87½	56¾	4970
Indiana 115A	....	132	132	P 32x6	DP34x7	Her OX	6–3⅜x5	27.3	H	PC	Lon	G	Eis	A-L	P. B&B	Own	U	4	Spi	Cla 720	S	½	7.85	46.79	B*	Shu 5410	Ros	87½	57½	5160
Indiana 615A	....	136	133½	P 32x6	DP34x7	Wis Y	4–4¼x5½	32.4	L	PC	Own	G	Bos-R	D-R*	P. Own	Own	R	5	Own	Eat 54	C	D	6.85	60.49	E*	Eat 54F	Own	106½	73¾	7500
Int. Harvester HS54	....	148*	200	S 36x5†	Ha S 151	Ha S 151	4–4¼x5½	28.9	H	PC	Ha S	G	Bos-R	D-R*	P. Own	Own	S	5	Own	Own	C	D	7.22	63.75	E*	Eat 54F	Own	106½	73¾	8165
Int. Harvester HS54C	....	148*	200	S 36x5†	S 36x10†	Ha S 151	4–4¼x5½	28.9	H	SP	Own	G	Bos-R	D-R*	P. Own	Own	C	5	Own	Own	C	D	8.75	51.5	B*	Own	Own	104	67	6400
Int. Harvester 54C	....	140*	185	S 36x5†	S 36x10†	Own	4–4¼x5	28.9	H	SP	Own	G	Bos-R	D-R*	D. Own	Own	R	4	Own	Own	R	F	9.1	54.0	B*	Own	Own	116	67	6345
Int. Harvester 54	....	140*	185	S 36x5†	S 36x8†	Own	4–4¼x5	28.9	H	SP	Own	G	Bos-R	D-R*	D. Own	Own	R	4	Spi	Eat 54	B	½	7.00	42.8	A	Cle B721	Ros	130	84	....
Kenworth DH	3130	166	....	P 32x6	DP32x6	Her WXC	6–4x4½	38.4	L	PC	Pie	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Cla B721	W	F	7.00	42.8	A	Cle F304	Ros	....	....	5400
King Zeitler 45	....	156*	168	S 36x5†	S 36x8†	Con S4	4–4¼x4½	28.9	L	SP	Han	V	Bos-R	A-L†	D. W-G	Ful G7	U	4	Blo	Tim 65000D	B	½	9.25	49.5	A*	Tim 15302	Ros	....	....	5100
Kissel	2950	180	180	S 36x4	P 32x6	Bud 50000	4–4¼x5½	28.9	L	SP	Pie	V	Eis	D-R	D. B-L	B-L 35	U	4	Spi	Tim 6566	W	F	8.50	40.8	A*	Tim 1544B	Ros	....	....	5100
Kleiber Speed	3850	163	163½	P 32x6	P 36x8	Con K4	4–4½x5½	32.4	L	PC	Non	V	Bos-R	Bos A‡	D. B-L	B-L 51	U	4	Spi	Tim 65720H	W	F	6.25	33.4	A†	Tim 14703H	Ros	144	97	6500
Kleiber	....	....	170	P 34x7	DP34x7	Her YXB	6–4¼x4¾	38.4	L	PC	Non	V	A-L	D-R	D. B-L	B-L 51	U	4	Cle	Tim 65660D	W	F	7.75	41.5	A	Tim 1544B	Ros	156	90	6900
*Lange O	....	....	200	P 32x6	P 32x6	Con 16R	6–4x4¼	38.4	H	PC	Non	V	A-L	D-R	D. B-L	B-L 35	U	4	Spi	Wis 8817	R	F	8.5	48.6	E†	Shu 510	Ros	....	....	....
Larrabee 50	2900	166	182	P 34x5	P 34x7	Wau 6XK	6–3⅜x4½	33.7	....	FP	Chi	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	Opt	Opt	....	Tim 15733H	Ros	138	90	5500
LeMoon HB25	3250	166	182	P 34x7	DP34x7	Wau 6XK	6–3⅜x4½	33.7	....	FP	Chi	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	8.25	38.78	G	Tim 15733H	Ros	138	90	5500
Le Moon HB26	3600	166	182	P 34x7	P 34x7	Wau 6KU	6–4¼x4¾	43.3	....	FP	Chi	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	6.00	32.10	G	Tim 15733H	Ros	138	90	5700
Le Moon HB27	....	144*	182	P 34x7	P 34x7	Wau FU	6–4¼x4¾	43.3	....	PC	Wau	V	A-L	A-L	D. B-L	Ful GU14	U	4	Spi	Tim 65000D	W	F	....	....	A*	Shu 510	Ros	120	77	4900
Luedinghaus	....	145*	150	P 32x10	S 36x8	Wis Y	6–3⅜x5	27.3	L	FP	Han	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Wis 6600	C	D	6.92	37.4	A‡	Shu 5410	Ros	205	131½	5200
Macar 46	....	....	180	P 32x6	DP32x6	Con K4	4–4¼x5	28.9	L	FP	Own	V	D-R	N-E†	D. Own	Own AB	U	4	Spi	Own AB	C	D	*8.87	43.0*	B*	Own AB	Own	....	....	....
Mack AB	3400	146½*	....	S 36x4	DS36x4	Own AB	4–4¼x5	28.9	L	FS	Own	V	Spi	N-E†	D. Own	Own AB	R	4	Spi	Own AB	R	F	*9.25	44.9*	B*	Own AB	Own	....	....	....
Mack AB	3850	164½*	....	S 36x4	DS36x4	Own AB	4–4¼x5	28.9	L	FS	Own	V	Spi	Spi	D. Ful	Ful G	U	4	Spi	Tim 6566	W	F	....	....	A‡	Tim	Ros	....	....	6250
Master 41A	....	154*	....	S 36x5	S 36x10	Bud ETU	4–4¼x5½	28.9	....	FP	....	V	Eis	Spi	D. Ful	Ful G	A	10	Spi	Tim 65600	W	F	....	....	A‡	Tim	Ros	....	....	....
Master 45	....	154*	....	S 36x5	S 36x10	Jackson	4–4¼x6⅜	28.9	....	FP	Wau	V	A-L	A-L	P. B&B	Ful GU	U	4	Pie	Wis 6600	R	F	6.33	31.8	A	Shu 550	Ros	120	68	5950
Menominee HX6	....	155*	182	P 34x7	P 36x8	Wau 6XK	6–3⅜x4½	33.7	L	PC	Per	V	A-L	A-L	D. Ful	Ful MGU	S	4	Blo	Tim 58000H	W	F	6.83	44.39	G†	Tim 15733H	Ros	147½	86½	5625
Moon 156B	....	176	203	P 34x7	DP34x7	Bud DW6	6–3⅜x5	33.7	L	PC	Chi	V	A-L	A-L	D. Ful	Ful MGU	S	4	Blo	Tim 65000H	W	F	6.0	39.0	G†	Tim 15733H	Ros	147½	86½	5950
Noble 156W	....	176	203	P 34x7	DP34x7	Wau CR	6–3⅜x5	33.7	L	PC	Mod	V	A-L	A-L	Ful	Ful MGU	A	4	Pet	Own 60	R	F	8.8	....	....	Shu 550	Ros	156	....	7300
Oneida C9	4415	175	....	P 36x6	P 36x8	Bud BUS	6–4x5½	38.4	L	PC	Non	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Eat	B	¾	5.5	22.0	E*	Eat	Han	84	46½	4600
Oneida C9L	....	163*	....	P 32x6	DP32x6	Lyc TF	6–3⅜x5	31.5	L	PC	Own	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¾	5.5	27.5	E*	Eat	Han	83	46½	4300
Republic 60	....	....	122	P 32x6	DP32x6	Lyc C4	6–3⅜x4½	25.6	L	PC	Non	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¾	6.87	27.5	B*	Eat	Han	83	46½	4300
Republic 58	....	....	122	P 32x6	DP32x6	Lyc 4SG	6–3⅜x4½	25.6	L	PC	Non	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¾	6.87	27.5	B*	Eat	Han	83	46½	4300
Republic 58-6	....	....	122	P 32x6	DP32x6	Lyc 4SG	6–3⅜x4½	25.6	L	PC	Non	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¾	6.87	27.5	B*	Eat	Han	83	46½	4300
Schacht 40	....	166	193	S 34x5	DS34x5	Wau 4XK	6–3⅜x4½	33.7	L	PC	Non	V	A-L	L-N	D. Ful	Ful MGU	R	F	Spl	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7000
Stoughton 50Z	4415	175	....	S 36x5	S 36x10	Bud BUS	6–4x5½	38.4	L	PC	Own	V	Eis	Bos A‡	D. B-L	B-L 51	U	5	Blo	Tim 65600SP	W	F	8.5	45.4	A*	Tim 15300	Ros	132	83	5400
Standard 21-31ZK	....	147*	170	S 36x5†	S 36x8	Con K4	4–4¼x5¼	27.2	L	FP	Sim	V	Eis	Bos A‡	D. B-L	B-L 55	A	4	Spi	Tim 65600SP	W	F	9.25	49.4	A*	Tim 15300	Ros	132	83	5488
Standard 21-31½K	....	147*	170	S 36x5†	S 36x8	Con K4	4–4¼x5¼	27.2	L	FP	Lon	V	Bos-R	D-R	D. Ful	Ful	U	4	U-P	Tim	R	F	7.25	47.5	G*	Eat	Ros	118	66½	5783
Stewart 18X	2690	165	190	S 32x6	DS32x6	Lyc TF	6–3⅜x5	31.5	L	FP	Own	V	D-R	D-R	D. Lon	Ful	U	3	Spi	Eat	S	F	5.11	19.8	G*	Eat	Ros	118	66½	5030
*Studebaker 77	2585	158	....	B 32x6.75	B32x6.75	Con 6B	8–3⅛x4⅜	39.2	L	PC	Sto	O	D-R	D-R	D. Lon	Ful	S	10	Spi	Wis 6600	R	F	6.75	41.5	A*	Shu 510	Ros	132¾	80¾	4800
United 50	....	153½	....	S 34x4	S 34x8	Her OX	4–4x5	25.6	L	PC	Pie	V	Eis	Eis	D. B-L	B-L 35	U	4	Blo	Wis 6600	R	F	7.75	41.5	A*	Shu 510	Ros	123¾	72¼	5000
United 50C6	2395	150	165	P 32x6	P 32x6	Her	4–4x5	25.6	....	FP	Per	V	D-R	D-R	D. Ful	Ful	U	3	....	Wis	R	F	Opt	Opt	....	Shu	Ros	....	....	....
Valley	2495	150	165	P 32x6	P 32x6	Her	4–4x5	25.6	....	FP	Non	V	D-R	D-R	D. Ful	Ful	U	4	....	Wis	R	F	Opt	Opt	....	Shu	Ros	....	....	....
Victor 45	2495	148	193½	P 32x6	DP32x6	Her WXB	6–3⅜x3¾	33.7	L	PC	Chi	V	D-R	D-R	D. Ful	Ful KU10	U	4	U-M	Wis 4900	W	F	7.1	40.1	G†	Shu 5410	Ros	....	....	4800
Wadsmuell L	....	170	170	S 36x5	S 36x10	Con L4	4–4½x5½	32.4	L	FP	Zen	V	Bos A	Bos-A	D. B-L	B-L 55	U	4	Spi	Tim 6560	W	F	7.75	41.5	*	Tim 1542	Ros	144	102	5200

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Trade Name and Model	General					Engine								Electrical System		Clutch	Gearset			Universals (Make)	Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase		Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds		Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low				Cab to rear of frame	Cab to rear axle	
3 Ton—Cont'd																															
Indiana 627	....	168°	216¾	P 32x6	P 38x9	Wis H	6-4x5	38.4	H	FP	K.P.	Lon	Str	V	A-L	A-L	P. B&B	B-L 55	U	4	Spi	Cta 720	S	½	7.00	42.8	A*	Shu 5550	Ros	138	83	6500
Indiana 628	....	216	216¾	P 34x7	DP34x7	Wis H	6-4x5	38.4	H	FP	K.P.	Lon	Str	V	A-L	A-L	P. B&B	B-L 55	U	4	Spi	Cla 720	S	½	6.28	42.8	A*	Shu 5550	Ros	180	131	6585
Indiana 127	....	162°	198½	P 36x5	P 36x10	Her L	4-4½x5¾	32.4	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 55	U	4	Spi	Cla 720	S	½	8.00	42.8	A*	Shu 5550	Ros	138	83	6350
Indiana 127A	....	141	141	P 32x6	DP34x7	Her K	4-4¼x5¾	28.9	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 51	U	5	Spi	Cla 720	S	½	7.00	41.72	A*	Shu 5550	Ros	87	56½	6600
Indiana 627A	....	147	147	P 32x6	DP34x7	Wis H	6-4x5	38.4	I	FP	K.P.	Lon	Str	V	Eis	A-L†	P. B&B	B-L 51	U	5	Spi	Cla 720	S	½	7.00	41.72	A*	Shu 5550	Ros	87	56½	7000
Kenworth J	3750	172	212	S 36x5	S 36x10	Bud EBU	4-4¼x5½	28.9	L	PC	Bud	Per	Zen	V	Bos-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65706DH	W	F	7.75	46.8	A*	Tim 15733	Ros	132	89	6300
Kenworth G	3450	172	212	P 32x6	DP32x6	Bud DW6	6-3⅜x5	33.7	L	PC	Bud	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Cla B721	B	½	6.25	33.4	A*	Tim 15733	Ros	132	87	5200
King Zeitler 60	....	156°	.....	S 36x5‡	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Pha	Chi	Str	G	Eis	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65700D	W	F	9.25	49.5	A*	Tim 15302	Ros	.....	.....	6200
King Zeitler 62A	.....	.....	.....	P 34x7	DP34x7	Con 6B	6-3⅜x5	33.7	L	PC	Han	Chi	Zen	G	Bos-R	Bos-R	D. B-L	B-L 55 Max	A	7	Blo	Tim 65700SP	W	F	7.75	73.6	B*	Tim 15302	Ros	.....	.....	6200
Kleiber Speed	4000	190	192½	P 34x7	DP34x7	Con 18R	6-4x4½	38.4	L	FP	Non	Own	Str	G	Bos-R	Bos-R	D. B-L	B-L 55	U	4	Spi	Tim 65600	W	F	7.75	41.5	A	Tim 15302	Ros	170	106	6200
Kleiber	4100	163	.....	S 36x5	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	V	Bos-R	Bos-A	D. B-L	B-L 60	.....	4	.....	Tim 65700D	..	..	.....	.....	...	Tim 1544B	Ros	.....	.....	.....
Kleiber Spec	4350	163	.....	S 36x5	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	R-T	Str	V	Bos-R	Bos-A	D. B-L	B-L 60	.....	4	.....	Tim 65700SP	..	..	.....	.....	...	Tim 1544B	Ros	.....	.....	.....
*Lange M	5100	140	222	P 38x7	DP38x7	Her YXC	6-4⅜x4¾	45.9	L	PC	Non	Own	Zen	V	Bos-R	Non	D. B-L	B-L 60 Max	A	7	Cle	Wis 1402	R	F	9.12	86.6	A*	Tim 15300	Ros	102	69½	6950
Lange H-1	4250	156	195	S 36x5	S 36x10	Her YXB	6-4x4¾	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Cle	Tim 65700D	W	F	9.33	50.0	A*	Tim 15300	Ros	139½	85½	6850
Larrabee Deyo 60	....	184	220	P 34x7	DP34x7	Con 18R	6-4x4½	38.4	H	PC	Non	Per	Zen	...	D-R	D-R	D. B-L	B-L	U	4	Spi	Tim	W	F	Opt	Opt	E†‡	Tim	Ros	156	92⅝	.....
Le Moon HB30	3950	182	182	P 36x8	DP36x8	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim 65706D H	W	F	6.00	3 2.10	G	Tim 15733H	Ros	162	105	6000
Le Moon HB31	3750	182	182	S 36x5	S 36x10	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim 65706D H	W	F	7.25	3 8.78	G	Tim 15733H	Ros	162	105	6000
Le Moon H3V	5650	211	211	P 36x8	DP36x8	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Wis 1261K	R	F	6.38	3 4.13	A	Tim 1560	Ros	198	125½	8000
Maccar 64	....	177	220	S 36x5	DS36x5	Bud YBUI	4-4½x6	32.4	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65700S	W	F	8.5	45.4	A‡	Tim 15302	Ros	151⅛	95⅛	7500
Maccar 66	.....	177	220	S 36x5	DS36x5	Bud BA	6-4⅛x5⅛	40.8	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65700S	W	F	8.5	45.4	A‡	Tim 15302	Ros	151⅛	95⅛	7500
Mack AB	3400	146½°	.....	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*8.87	43.0*	B*	Own AB	Own	.....	.....	.....
Mack AB	3850	164½°	.....	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*9.25	44.9*	B*	Own AB	Own	.....	.....	.....
Mack BJ	5800	168½°	.....	S 36x8	DS36x8	Own A-L	6-4¼x5	43.3	L	PS	Non	Own	Str	E	N-E	N-E	P. Own	Own AL	A	4	Spi	Own AL	W	F	7.25	34.8	G†	Tim 14703H	Ros	132	78	4500
*Moreland B-6	2200	158½	.....	P32x6	P32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 35	U	4	Cle	Tim 63721H	W	F	7.25	34.8	G†	Tim 15733H	Ros	149	101	7200
Noble 166	....	180	.....	P 34x7	DP34x7	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Pie	Chi	Str	V	A-L	A-L	D. Ful	Ful	A	4	Blo	Tim 65706DHP	W	F	6.00	27.8	G†	Tim 15733H	Ros	149	101	7200
Oneida CC9	....	160°	.....	P 34x7	DP34x7	Wau 6XL	6-3½x4½	29.4	L	PS	Non	Per	Str	V	A-L	A-L	D. Ful	Ful GCL	A	4	Pet	Tim 65660	W	F	8.5	.....	A	Shu 550	Ros	.....	.....	7200
Pierce-Arrow XB	3750	150	180	S 36x5‡	DS36x5‡	Own XB	4-4x5½	25.6	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own XB	A	4	Spi	Own XB	W	½	9.25	48.1	A*	Own XB	Own	125⅞	72⅞	6280
Rehberger B	....	162	180	S 36x5	S 36x10	Bud YBU	4-4½x6	32.4	L	PC	K.P.	Bus	Zen	V	Eis	D-R	D- B-L	B-L 51	U	4	Spi	Tim 6566	W	F	8 5	46.2	A*	Shu 5550	Ros	146¼	90	6460
Relay 60C	4480	175	.....	P 36x6	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Own 60	R	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7450
Reo GA	2035	163	.....	P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han	.....	.....	.....
Reo GC	2140	179	.....	P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han	.....	.....	.....
Reo GD	1985	134	.....	P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han	.....	.....	.....
Republic 25W	....	165°	.....	S 36x5	S 36x10	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U-M	Eat	I	D	8.40	40.3	B*	Eat	Jac	144¾	89	5800
Republic 65	....	179°	.....	P 34x7	DP34x7	Lyc TS	6-3⅞x5	36.2	L	PS	Non	Own	Str	P	D-R	D-R	D. B-L	B-L	U	4	U-M	Eat	R	F	7.5	36.0	G*	Eat	Han	165	100½	6100
Sanford O	....	173	188	P 32x6	DP32x6	Bud	6-3¾x5	33.7	..	FP	Non	Fed	Str	P	D-R	D-R	D. B-L	B-L	U	4	Blo	Eat	B	½	7.57	47.3	H	Eat	Ros	167	101¾	5100
Schacht 65	....	151	198	S 36x5	S 36x12	Wau KU	6-4¼x4¾	43.3	L	PC	Han	Own	Zen	G	Bos-A	Non	D. B-L	B-L 60	A	7	Spi	Own	R	F	10.3	65.0	A‡	Own	Own	152	95⅛	7500
Selden Roadmaster 47	....	165	180	P 32x6	DP32x6	Con 6B	6-3¾x5	33.7	L	FP	Non	Own	Str	V	D-R	Bos-A	D. B-L	B-L 35	U	4	.....	Cla 720	S	½	Opt	Opt	A‡	Shu	Ros	168	97	5500
Service 60Z	4480	175	.....	S 36x5	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733	Ros	156	97½	7100
Sterling DW14-64	....	163	177	S 36x4	S 36x8	Own 6XK	6-3¾x4½	33.7	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 51	U	4	Spi	Tim 65600	W	F	9.25	49.4	B*	Tim 15300	Ros	149¾	85¾	5625
*Studebaker 88	2985	184	.....	B 7.50/20	B 7.50/20	Own	8-3½x4¾	39.2	L	PC	Non	Lon	Str	O	D-R	D-R	D. Lon	Ful	U	3	Spi	Eat	S	½	5.11	19.8	G*	Eat	Ros	144⅝	92⅝	5200
U. S. 30	3375	Opt	215	S 36x5	S 36x10	Bud DW	6-3⅜x5	33.7	L	PC	Bud	Own	Str	V	A-L	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65706D	W	F	8.5	45.5	B*	Shu 5550	Ros	149	95	6300
U. S. 31	3275	156°	179	S 36x5	S 36x10	Bud EBU-I	4-4¼x5½	28.9	L	PC	Bud	Own	Str	V	Spl	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65706D	W	½	8.5	45.5	B*	Shu 5550	Lav	160	101	6000
Valley	3495	145°	.....	P 34x7	P 34x7	Her	4-4¼x5¾	28.9	..	FP	Non	Chi	.....	.....	D-R	D-R	D. Ful	Ful	U	6	.....	Wis	R	..	Opt	Opt	...	Shu	.....	.....	.....	.....
Valley	3295	145°	.....	P 38x7	P 38x7	Her	4-4¼x5¾	28.9	..	FP	Non	Chi	.....	.....	D-R	D-R	D. Ful	Ful	U	4	.....	Wis	R	..	Opt	Opt	...	Shu	.....	.....	.....	.....
Victor 70	3495	162	.....	P 34x7	P 40x8	Her WXC	6-4x4½	38.4	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Ful	Ful MGU	U	4	U-M	Wis 8913	D	R	7.85	55.1	G†	Shu 5550	Ros	.....	.....	5800
Ward La France 2B	.....	Opt	.....	S 36x5	DS36x5	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Str	G	Apo	A-L	D. B-L	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	A‡	Tim	Ros	.....	.....	5900
Ward La France 2B6	.....	Opt.	.....	P 36x6	DP36x6	Wau 6KU	6-4¼x4¾	43.3	..	FP	Wau	Own	Zen	V	Bos-R	A-L	D. B-L	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	B‡	Shu 5550	Ros	.....	.....	.....
Whitcomb 6-wheeler	.....	Opt	Opt	P 36x8	P 36x8	Wis Z	6-4½x5	48.6	I	FP	Non	Mod	Str	V	L-N	L-N	D. Ful	Ful	U	4	Spi	Own	W	F	Opt	Opt	G	Own	Ros	.....	.....	.....
*White 58	4400	180°	195	S 36x5‡	DS36x5‡	OwnGRB-I	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	L-N‡	L-N‡	P. Own	Own 2B	U	4	Spi	Own	R	F	7.6	49.7	B*	Own	Own	148½	91½	7535
Witt-Will 8S	.....	168°	172	S 36x4‡	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65700D	W	F	9.25	40.0	A*	Tim 15300	Ros	136⅛	79⅛	5700
Witt-Will S-L	.....	Opt	.....	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65700D	W	F	Opt	Opt	A*	Tim 15300	Ros	.....	.....	5850
Witt-Will SL6	.....	.....	.....	P 34x7	DP34x7	Con 18R	6-4x4½	38.4	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65706B	W	F	.....	.....	...	Tim 15300	Ros	.....	.....	.....
Woods 53 W 6	.....	160	184	P 34x7	P 36x8	Bud DW6	6-3¾x5	33.7	L	PC	Non	Chi	Zen	V	D-R	D-R	D. B-L	B-L 55	A	7	Blo	Tim	W	F	7.75	.....	F†	Tim	Ros	141	105	6000
World D-115	.....	168½	.....	P 36x8	DP36x8	Lyc	8-3¼x4½	33.8	L	PC	Han	Mod	Zen	O	A-L	A-L	P. Lon	B-L	U	4	Spi	Tim	S	F	7.8	Opt	F	Shu	Ros	144¼	88¼	6100
3½ Ton																															
American La France W	....	Opt	201¾	S 36x5	S 36x10	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.6	B*	Own 2R	.....	132	81⅛	6600
Autocar HS	4100	114	203	S 34x6	S 36x12	Own	4-4½x5½	32.4	L	SP	Pha	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	8.72	55.28	B	Own J	Ros	131½	76	6900
Autocar SHS	4400	114	203	S 34x6	S 36x12	Own	6-4x5⅛x5½	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	8.72	55.28	B	Own J	Ros	131½	76	7000
*Autocar TAS	5350	187	213	P 36x8	DP36x8	Bud BA	6-4⅜x4¾	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	7.24	46.55	B	Own J	Ros	175¼	104¾	7100
Biederman	....	180°	220	S 36x6	S 36x12	Con 6B	6-3¾x5	33.7	L	PC	Han	Own	Zen	G	Apo	A-L‡	D. B-L	B-L 51	A	7	Pet	Tim 66702DH	W	F	9.5	52.0	A*	Shu	Ros	164	.....	7000
Chicago 35C	.....	Opt	Opt	S 36x5	S 36x10	Wau CU	4-4⅜x5¾	30.6	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 55 Max	A	7	Pet	Tim 66702DH	W	F	10.33	98.1	B†	Tim 16302	Ros	Opt	Opt	8570
Clinton 85-6	.....	190	Opt	P 34x7	DP34x7	Bud BUS	6-4x5½	38.4	L	FP	Non	Per	Str	V	Spl	D-R	B-L	B-L 55	A	4	Blo	Tim 65600SP	W	F	7.75	73.6	B*	Tim 15302	Ros	Opt	Opt	5975
Clydesdale 4	....	177°	.....	S 36x6	DS40x6	Con B5	4-4¾x6	36.0	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D.B-L	B-L 60 Max	A	7	Spi	Tim 6666	W	F	10.3	98.16	A*	Tim 16300	Ros	.....	.....	7500
Clydesdale 4X	....	177°	.....	S 36x5	DS40x5	Con L4	4-4½x5½	32.4	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 60 Max	A	7	Spi	Tim 6666	W	F	10.3	98.16	A*	Tim 16300	Ros	.....	.....	7300
Coleman D40X	.....	130	184	P 40x8	P 40x8	Bud BA	6-4⅛x5⅛	40.8	L	FP	Bud	R-T	Zen	V	D-R	D-R	D. Ful	Ful RU16	U	8	Spi	Wis	R	F	8.33	159.0	E	Wis	Ros	144	89	8900
Commerce 70Z	5250	175	.....	S 36x6	S 36x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8200
*Concord JLX-6	.....	202¼	222¼	P 34x7	DP34x7	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65706D	W	F	6.1	32.6	B‡	Tim 15300	Ros	Opt	Opt	7000
Diamond T700	....	172	202	S 36x5	S 36x10	Her YXC	6-4⅜x4¾	45.9	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Tim	W	F	10.3	52.2	B†‡	Tim	Ros	.....	.....	8100

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Trade Name and Model	General: Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
4 Ton—Cont'd																																
Hahn M.	....	160°	192	S 36x5	S 36x12	Con L	4-4¾x6	36.1	L	FP	Pha	Chi	Str	G	Bos-R	L-N	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	10.25	.....	A	Tim 1632B	Ros	164	94	7200
Hendrickson U 4	4300	Opt	Opt	S 36x6	S 40x14	Bud YBU-I	4-4½x6	32.4	L	FP	Pha	Chi	Zen	G	Spl	.....	D. B-L	B-L 60 Max	A	7	Spi	Tim 66700D	W	F	Opt	Opt	A*	Tim 16300B	Ros	Opt	Opt	7620
Indiana 138.	....	162½	198½	S 36x5	S 36x12	Her L	4-4½x5¾	32.4	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 60	A	7	Spi	Tim 66700	W	F	8.75	83.1	B*	Shu 5550	Ros	132	84¼	7800
Indiana 638.	....	168½°	204½	S 36x5	S 36x12	Wis H	6-4x5	38.4	H	FP	K.P.	McC	Str	V	Eis	A-L†	P. B&B	B-L 60 Max	A	7	Spi	Tim 66700	W	F	8.75	83.1	B*	Shu 5550	Ros	132	84¼	8100
*Kenworth N.	4395	170	200	S 36x6‡	S 40x12	Bud YBU	4-4½x6	32.4	L	PC	Bud	Per	Zen	V	Bos-R	D-R	D. B-L	B-L 60	A	4	Spi	Tim 66702D	W	F	8.75	53.3	A*	Tim 16302	Ros	126	93	8800
Kissel Heavy Duty	....	168	.....	S 36x5‡	S 36x12‡	Wau DU	4-4½x6¼	32.4	L	PC	Pie	McC	Str	V	Eis	D-R‡	D. W-G	Ful H	A	4	Spi	Tim 16302	W	½	11.7	73.6	A*	Tim 66700	Ros	.....	...	7600
*Kleiber.	5000	202	.....	P 36x8	DP36x8	Bud BA6	6-4⅝x5½	40.8		PC	.....	Fed	Str	V	Bos-R	.....	D. B-L	B-L	A	7	Spi	Tim 65700SP	W	F	Opt	.....	A*	Tim 15302	Ros	.....	.....	7500
Lange F6.	4650	168*	183	S 36x5	S 36x12	Her YXC	6-4⅝x4¾	45.9	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 55	A	4	Cle	Tim 66700	W	F	10.5	56.0	A*	Tim 16300	Ros	159½	104½	8900
Le Moon H46.	....	184	192	P 36x8	P 36x8	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	V	A-L	A-L	D. B-L	B-L 51	U	5	Opt	Tim 6370H	W	F	6.25	46.31	G	Tim 16302	Ros	162	105	...
Maccar 84.	....	177	209¼	S 36x6	DS36x6	Bud YBUI	4-4½x6	32.4	...	PC	Pie	Bus	Str	V	Bos-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 66702D	W	F	9.66	51.7	...	Tim 16302	Ros	148	92½	8200
Maccar 86.	....	177	209¼	S 36x6	DS36x6	Bud BA-6	6-4⅛x5½	40.8	...	PC	Pie	Bus	Str	V	Bos-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 66702D	W	F	9.66	51.7	...	Tim 16302	Ros	.....	.....	8200
Mack BJ.	5800	168½°	.....	S 36x8	DS36x8	Own A-L	4-4¼x5	43.3	L	PS	Non	Own	Str	E	N-E	N-E	P. Own	Own AL	A	4	Spi	Own AL	R	F	4.25*	22.4*	G*	Own AK	Own	.....	.....	.....
Master 55.	....	158°	.....	S 36x5	S 40x12	Jackson	4-4¼x6⅝	28.9	...	FP	.....	.....	Str	...	Spl	.....	D. Ful	Ful 60	A	...	Spi	Tim	W	...	.....	.....	A‡	Tim	Ros	.....	.....	.....
Pierce-Arrow WC.	5100	162	180	S 36x5‡	DS36x6	Own WC	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own WC	A	4	Spi	Own WC	W	½	8.00	41.5	B*	Own WC	Own	133¼	78¾	8490
Rehberger C.	....	174	192	S 36x6	S 36x12	Bud YBU	4-4½x6	32.4	L	PC	K.P.	Bus	Zen	V	Eis	D-R	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	8.75	46.8	A*	Tim 16302	Ros	157¾	102	7940
Relay 80C.	5330	175	.....	P 36x6	S 40x14	Bud BA6	6-4⅛x5½	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	P. B&B	Cov SHO	A	8	Blo	Own 74	R	F	9.95	84.18	A	Tim 16302	Ros	144	94½	8800
Sanford R.	....	159	188	P 34x7	DP34x7	Bud	6-3¾x5	33.7	...	FP	Non	Fed	Str	P	D-R	D-R	D. B-L	B-L	U	4	.....	Eat	R	F	8.85	99.7	G	Eat	Ros	188	106	6640
Selden 47X.	....	130	143	P 34x7	DP34x7	Con 6B	6-3¾x5	33.7	L	FP	Non	Own	Str	V	D-R	.....	D. B-L	B-L	A	7	Spi	Wis	R	...	.....	.....	A*	Shu	Ros	87	53	6260
Service 80Z.	5330	175	.....	S 36x6	S 36x14	Bud BA6	6-4⅛x5½	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8400
Sterling DC21-44.	....	160	174	S 36x5	S 36x12	Own CU	4-4⅝x5¾	30.6	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 51	U	4	Spi	Own	C	D	9.3	50.1	D*	Tim 15300	Ros	147¼	86¼	7080
Stewart 22X.	4200	165	235	S 36x5	S 36x12	Lye TS	6-3⅞x5	36.2	L	PC	Non	Own	Str	G	D-R	D-R	D. Ful	Ful	A	12	Spi	Tim	W	F	10.5	151.6	A	Sal	Ros	136¼	79½	7990
United 40D.	....	124¼	.....	P 34x7	DP34x7	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Eis	A-L	D. B-L	B-L 35	A	4	Blo	Wis 6600	R	F	7.75	41.46	A*	Shu 510	Ros	70⅜	54½	5100
U. S. 40.	4050	168°	185	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	Bud	Own	Str	V	Spl	A-L	D. B-L	B-L 55	A	4	Blo	Tim 66700D	W	F	10.3	54.8	B‡	Tim 16300	Lav	156	104	7900
Valley.	3495	145°	.....	P 36x7	P 36x7	Her	4-4½x5¾	32.4	...	FP	Non	Chi	.....	...	D-R	D-R	D. Ful	Ful	U	4	.....	Wis	R	...	Opt	Opt	...	Shu	Ros	.....	.....	.....
Ward La France 4D.	.....	Opt	.....	S 36x5	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	G	Bos-R	A-L	D. B-L	B-L 60 Max	A	7	Spi	Tim 66900	W	F	9.5	90.2	B‡	Tim 16300	Ros	.....	.....	8750
Ward La France 4D6.	.....	Opt	.....	S 36x5	DS36x6	Wau 6KU	6-4¼x4¾	43.3	L	PC	Wau	Own	Zen	V	Bos-R	A-L	D. B-L	B-L 60 Max	A	7	Spi	Tim 66900	W	F	9.5	90.2	B‡	Tim 16300	Ros	.....	.....	8750
Witt-Will A4.	....	172°	192	S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC	Pie	Own	Zen	G	Eis	D-R	D. B-L	B-L 60	A	4	Spi	Tim 66700D	W	F	10.2	53.3	A*	Tim 16300	Ros	139	89	9200
Witt-Will A6.	.....	.....	.....	.....	.....	Con R20	6-4⅛x4¾	40.8	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	7	Spi	Tim 66700D	W	F	.....	.....	...	Tim 16300	Ros	.....	.....	.....
4½ Ton																																
Acme 90L.	....	192	.....	S 36x5	S 40x12	Con B7	4-5x6	40.0	L	FP	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 60	A	7	Blo	Tim 66700D	W	F	8.75	83.5	A	Tim 16300	Ros	168⅝	105⅞	7900
American La France S.	5200	Opt	Opt	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	G&O	Zen	V	Bos-A	L-N	Own 5R	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 3R	Ros	Opt	Opt	8900
Republic 30W.	....	170°	.....	S 36x5	S 36x12	Wau CU	4-4⅝x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U.M	Eat	I	D	10.2	49.2	B	Shu	Han	145¾	90	6700
5 Ton																																
Acorn 100.	4800	160	.....	S 36x6	S 40x14	Bud YBUI	4-4½x6	32.4	L	PC	McC	Chi	Zen	G	Bos-R	.....	D. Ful	B-L 60	U	8	Pet	Tim 67700	W	F	Opt	Opt	A	Tim 1632	Ros	.....	.....	9000
Amer. La France V.	5500	Opt	Opt	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	.....	Opt	Opt	9600
Am. La France Big Ch.	6500	226	196	P 40x8	DP40x8	Bud GL6	6-4½x6	48.6	L	FP	Bud	G&O	Str	V	D-R	D-R	P. B-L	Own	A	4	Own	Own 16R	R	F	6.13	33.0	A	Own 16R	Own	209	139	11000
Atterbury 24E.	....	174°	204	S 36x6	DS40x7	Con B7	4-5x6	40.0	L	FP	Pie	Fed	Zen	V	A-L	Bos-A	D. B-L	B-L 60 Max	A	7	Spi	Tim	W	F	11.6	110.7	A*	Tim	Gem	159¾	89¼	10225
*Autocar SCM.	5000	162	213	S 34x7	S 36x14	Own	6-4½x4¾	48.6	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own B	A	4	Spi	Own M	R	F	9.89	72.1	B	Own CL	Ros	140	81	8600
Biederman.	....	180°	200	S 36x7	S 36x14	Con 7T	6-4¼x6	43.3	L	PC	Han	Own	Zen	G	D-R	D-R	D. B-L	B-L 60	U	7	Spi	Tim	W	F	11.5	60.6	A*	Shu	Ros	164	.....	9200
Brockway T.	....	175°	205⅝	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 60	A	4	Spi	Tim 68700S	W	F	10.0	53.5	B*	Tim 17300	Ros	182	105½	10065
Brockway T-18.	....	178°	208¼	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700S	W	F	10.0	95.0	B*	Tim 17300	Ros	188	108½	10500
Clinton 120L.	....	204	Opt	S 36x6	DS36x7	Bud BTU	4-5x6½	40.0	L	PC	Bud	Own	Zen	V	Spl	Bos-A	D. B-L	B-L 60	A	4	Blo	Tim 68702DHP	W	F	8.80	47.1	A†	Tim 17300	Ros	Opt	Opt	9550
Clinton 120LM.	....	204	Opt	S 36x6	DS36x7	Bud BTU	4-5x6½	40.0	L	FP	Bud	Own	Zen	V	Spl	Bos-A	D. B-L	B-L 60 Max	A	7	Blo	Tim 68702DHP	W	F	8.80	83.6	A†	Tim 17300	Ros	Opt	Opt	9650
Clydesdale 2.	....	176°	.....	S 36x7	DS40x7	Con B7	4-5x6	40.0	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 60 Max	A	7	Spi	Tim 6760	W	F	11.6	110.8	A*	Tim 17300	Ros	.....	.....	9750
Coleman X-100.	....	144	184	P 42x9	P 42x9	Bud BA6	6-4⅛x5½	40.8	L	FP	Bud	R-T	Zen	V	D-R	D-R	D. Ful	Ful RU16	U	8	Spi	Wis 122	R	F	8.54	140.3	E	Wis 122F	Ros	168	105	9660
Coleman X100F.	....	144	184	P 42x9	P 42x9	Bud GL	4-4½x6	48.6	L	FP	Bud	Per	Str	V	D-R	D-R	D. Ful	Ful HU16	U	8	Spi	Wis 122	R	F	8.54	175.0	E	Wis 122F	Ros	168	105	9820
Corbitt 70.	....	178	230	S 36x6	DS40x6	Con B7	4-5x6	40.0	L	FP	Sim	Per	Zen	V	Eis	L-N‡	D. B-L	B-L 60 Max	A	7	Spi	Tim 67700D	W	F	10.0	95.0	A‡	Tim 17300	Ros	164	108	9410
*Day-Elder L.	....	170°	196	S 36x6	DS40x7	Con 21R	6-4⅜x4¾	45.9	L	FP	Con	Bus	Zen	V	D-R	D-R‡	D. B-L	B-L 60	A	4	Spi	Tim 67700D	W	F	10.2	64.6	A	Tim 17300	Gem	139½	79½	10000
Denby 210.	....	170	.....	S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC	.....	Lon	Zen	G	Eis	.....	D. Ful	Ful HU	A	4	U-P	Cla	...	D	12.5	62.7	...	Tim	Ros	.....	.....	8590
Diamond T 1000.	....	170½°	200½	S 36x6	S 40x12	Her YXC2	6-4½x4¾	48.6	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	B-L	A	7	Spi	Tim	W	F	.....	.....	B†‡	Tim	Ros	.....	.....	10000
Dixon.	4800	160	.....	S 36x5	S 36x12	Her G	4-4¾x5¾	36.1	L	PC	Pie	G&O	Zen	V	Eis	D-R	D. Ful	Ful	A	8	Spi	Tim 6666	W	F	8.75	137.0	A	Shu 610	Ros	.....	.....	8100
Douglas Six Wheeler.	....	210	.....	P 38x9	P 38x9	Bud GL6	6-4½x6	48.6	L	PC	Bud	Own	Zen	V	L-N	L-N	D. Ful	Ful HOG	A	8	Blo	Wis 7500	W	F	6.25	58.5	A‡	Shu 615	Ros	240	140	10000
Douglas.	....	185°	.....	S 36x6	S 40x12	Bud BBU	4-5x6½	40.0	L	PC	Non	Own	Zen	V	Bos-R	L-N	D. Ful	Ful HU	U	4	Blo	Wis 1450	R	F	9.12	57.5	A‡	Wis 50	Ros	216	130	9200
Duplex M 5-7.	....	Opt	.....	P 34x7	DS36x7	Bud GL6	6-4½x6	48.6	L	FP	.....	Mod	Str	V	A-L	A-L	D. B-L	B-L 70	.....	7	Pet	Tim 68700	W	F	Opt	Opt	A*	Shu	Ros	.....	.....	10000
†Eagle 6-40.	.....	160	.....	P 36x8	P 36x8	Her YXC	6-4⅝x4¾	45.9	L	PC	Opt	Per	Zen	V	A-L	A-L	D. B-L	B-L 60	A	7	Pet	Tim 65706D H	W	F	.....	.....	G	Tim 15733H	Ros	.....	.....	8000
F.W.D. MF6.	5000	148	.....	S 36x8	S 36x10	Wau	6-4¼x4¾	43.3	L	PC	Wau	Per	Zen	V	Eis	Non	O. H-S	Own	A	5	Blo	Own M	B	F	8.9	88.6	B	Own M	Ros	132	93	7775
Freeman.	.....	186	.....	P 36x8	DP36x8	Bud BA6	6-4⅛x5½	48.6	...	FP	.....	Lon	Str	...	Bos-R	Bos-R	D. Ful	Ful HU16	U	4	.....	.....	B	...	.....	.....	E	Woh	.....	.....	.....	.....
General Motors K-102	4250	160*	184	S 36x6	S 40x14	Own 89	4-4½x6½	32.4	L	FP	K.P.	McC	Mar	V	Eis	D-R	D. Own	Own	A	7	Own	Tim 67600	W	F	10.0	86.3	A‡	Tim 1732	Own	.....	.....	9245
G-P 92-4.	.....	158	Opt	P 38x7	DP40x8	Wau ER	4-5x6¼	40.0	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 68700	W	F	8.73	.....	...	Tim 17300	Ros	.....	.....	9600
G-P 92-6.	.....	158	Opt	P 38x7	DP40x8	Wau 6AB	6-4⅛x4¾	48.6	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 68700	W	F	8.73	.....	...	Tim 17300	Ros	.....	.....	9600
Gramm 60.	5370	153°	200	S 36x6	S 36x14	Her G	4-4¾x5¾	36.1	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm 60.	5370	153°	200	S 36x6	S 36x14	Lye TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm Bernstein 40.	.....	156°	176	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	She	W	½	8.75	93 6	B*	Shu 610	Ros	144	87¾	8360
Gramm-Bernstein 50.	.....	168*	188	S 36x6	DS40x6	Con B7	4-5x6	40.0	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	Wis 1010F	W	F	11.75	125.7	B	Shu 610	Ros	162	97	9700
Guilder K5.	5250	170	.....	S 36x6	DS40x6	Bud YTU	4-4½x6	32.4	L	PC	Pie	G&O	Zen	G	Eis	Non	D. B-L	B-L 60	A	4	M-E	Wis 1600	R	F	9.00	.....	B*	Shu 650	Ros	.....	.....	8800
†Guilder K-6	5450	174	190	P 36x8	DP36x8	Bud BA6	6-4½x5½	40.8	L	FP	Non	G&O	Zen	V	D-R	D-R	D. B-L	B-L 55	U	4	Spi	Tim 66700	W	F	Opt	Opt	B	Shu 650	Ros	.....	.....	7850
Hahn R.	.....	162°	200	S 36x6	S 40x12	Con B5	4-4¾x6	36.1	L	FP	Pha	Chi	Str	G	Bos-R	L-N	D. B-L	B-L 60	U	4	Spi	Tim 6760	W	F	10.25	.....	A	Tim 1632B	Ros	164	94	8450

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Gasoline Tractor-Trucks

Amer. La France 5 Ton.	3950	131	131	S 36x5	S 36x10	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.8	B*	Own 2R	.....	95⅝	63⅝	6400
Amer. La France 7 Ton.	4950	133	133	S 36x6	DS36x6	Own 3R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 3R	A	4	Own	Own 5R	W	F	8.8	47.8	B*	Own 3R	.....	96¾	66¼	8400
Amer. La France 10 Ton.	5500	133	133	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	.....	96¾	66¼	9400
Amer. La France 13 Ton.	5750	133	133	S 36x7	DS40x7	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	.....	96¾	66¼	9500
Amer. La France 15 Ton.	6000	133	133	S 36x7	DS40x8	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	11.67	63.5	B*	Own 5R	.....	96¾	66¼	9700
Armleder 30	....	115	.....	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	½	8.8	47.8	A	Tim	Ros	.....	.....	4100
Armleder 50	....	116	.....	S 36x4	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim	W	F	9.25	49.5	A	Tim	Ros	.....	.....	5100
Armleder 70	....	119	.....	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Spi	Tim	W	F	12.0	64.2	A	Tim	Ros	.....	.....	7000
Autocar HT	3750	97	137	S 34x5	S 36x10	Own*	4-4½x5½	32.4	L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	8.5	53.9	A	Own J	Ros	89¾	59	5800
Autocar SHT	4000	102	137	S 34x5	S 36x10	Own*	6-4½x4¾	40.8	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	8.5	53.9	A	Own J	Ros	94¾	64	5800
Autocar HST	4100	99	137	S 34x6	S 36x12	Own*	4-4½x5½	32.4	L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	9.89	62.7	A	Own J	Ros	91¾	61	6900
Autocar SHST	4400	104	137	S 34x6	S 36x12	Own*	6-4⅝x4¾	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	9.89	62.7	A	Own J	Ros	96¾	66	7000
*Diamond T302-2	....	135½	.....	P 32x6	DP32x6	Her WXB	6-3¾x4½	33.7	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Cla	S	½	.....	.....	6†‡	Cla	Ros	86¼	.....	4500
*Diamond T502-2½	....	141⅛	.....	S 34x5	S 34x8	Her WXC	6-4x4½	38.4	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Tim	W	F	.....	.....	6†‡	Tim	Ros	92	.....	5700
*Diamond T 550-2½	....	128½	.....	P 32x6	DP32x6	Her WXC	6-4x4½	38.4	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Cla	S	½	.....	.....	6†‡	Cla	Ros	80⅝	.....	5300
*Diamond T 600-3	....	145½	.....	P 36x8	DP36x8	Her YXC	6-4⅝x4¾	45.9	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	B-L	A	7	Spi	Tim	W	F	.....	.....	6†‡	Shu	Ros	96½	.....	6700
*Federal LD	....	132	.....	S 36x4‡	S 36x8‡	Con K4	4-4½x5¼	27.2	L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Pet	Tim 65600SP	W	F	8.50	80.75	B*	Own	Gem	93	59	5000
*Federal HD	....	136	.....	S 36x5‡	S 40x12‡	Con L4	4-4½x5½	32.4	L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Pet	Tim 66700SP	W	F	9.5	90.25	B*	Tim 1632B	Gem	96	59	6700
General Motors K-10T	....	111¼	.....	S 36x5	S 36x12	G.M.C. 89	4-4½x6½	32.4	L	FP	K.P.	MeC	Mar	V	Eis	D-R	D. Own	Own	U	7	Own	Tim 66600	W	F	10.33	81.01	A‡	Tim 16380	Own	.....	.....	7677
General Motors K-15T	....	111¼	.....	S 36x5	S 36x14	G.MC. 89	4-4½x6½	32.4	L	FP	K.P.	MeC	Mar	V	Eis	D-R	D. Own	Own	U	7	Own	Tim 67600	W	F	11.65	91.46	A‡	Tim 16380	Own	.....	.....	8477
Gramm 35-6 ton	4160	153°	200	S 36x5‡	S 36x10‡	Her L	4-4½x5¾	32.4	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 35-6 ton	4160	153°	200	S 36x5‡	S 36x10	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 45-10 ton	4735	153°	200	S 36x5‡	S 36x12‡	Her L	4-4½x5¾	32.4	L	PC	Pie	Own	Zen	V	A-L	A-L	D Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 45-10 ton	4735	153°	200	S 36x5‡	S 36x12‡	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 60-15 ton	5370	153°	200	S 36x6	S 36x14	Her G	4-4¾x5¾	36.1	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	133.4	B*	Wis 30	Ros	138	83¾	8700
Gramm 60-15 ton	5370	153°	200	S 36x6	S 36x14	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	133.4	B*	Wis 30	Ros	138	83¾	8700
Harvey WTT 6 ton	3500	125	125	S 36x5	S 36x10	Bud EBU-I	4-4¼x5½	28.9	L	PC	McC	Own	Str	G	Bos-R	Non	D. B-L	B-L 55	A	7	Spi	Tim 65700	W	F	10.5	99.75	A*	Tim 15300	Ros	82	52	6950
Harvey WHT 10 ton	4250	125	130	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	McC	Own	Str	G	Bos-R	Non	D. B-L	B-L 60	A	7	Spi	Tim 66600	W	F	10.3	98.15	A*	Tim 16300	Ros	87¾	55¾	8900
Int. Harvester 54C	....	122	122	S 36x5	S 36x10	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own	C	D	8.15	48.0	B*	Own	Own	78	49	6000
Int. Harvester 74C	....	137	137	S 36x6	S 36x12	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own *	C	D	10.6	86.0	B*	Own	Own	92	64	8315
Int. Harvester HS-54	....	130	200	S 36x5	S 36x8	HaS 151	4-4¼x5½	28.9	H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 54	R	F	6.85	60.49	E*	Eat 54F	Own	88½	55¼	7675
Int. Harvester HS-54-C	....	130	200	S 36x5	S 36x10	HaS 151	4-4¼x5½	28.9	H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	7.22	63.75	E*	Eat 54F	Own	84 7/16	55¼	7900
Int. Harvester HS-74	....	144	235	S 36x6	S 40x12	HaS 152	4-4¾x5½	36.1	H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 74	R	F	7.85	70.49	E*	Eat 74F	Own	101	65⅞	9530
Int. Harvester HS-74-C	....	146	235	S 36x6	S 40x12	HaS 152	4-4¾x5½	36.1	H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	8.81	79.11	E*	Eat 74F	Own	95⅞	67⅝	9955
Int. HarvesterHS-104-C	....	146	235	S 36x6	S 40x14	HaS 152	4-4¾x5½	36.1	H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	10.08	90.52	E*	Eat 74F	Own	95⅞	67⅝	10425
Mack AB 5-6 Ton	3400	122½	.....	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	10.5*	51.1*	B*	Own AB	Own	.....	.....	.....
Mack AC 7-10 Ton	4950	128	.....	S 34x5	DS36x5	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	9.1	58.0*	D*	Own AC	Own	.....	.....	.....
Mack AC 11-14 Ton	5500	128	.....	S 34x6	DS36x6	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	9.7	62.2*	D*	Own AC	Own	.....	.....	.....
Mack AC 15 Ton	6000	128	.....	S 34x7	DS36x7	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	11.5	73.5*	D*	Own AC	Own	.....	.....	.....
Pierce-Arrow XB	3750	140	140	S 36x5	S 36x5	Own XB	4-4x5½	25.6	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own XB	A	4	Spi	Own XB	W	½	9.25	50.2	A*	Own	Own	99 7/16	70 1/16	6180
Oneida SFF-10	....	Opt	.....	P 36x8	P 36x8	Wau 6KU	6-4¼x4¾	43.3	L	PC	Wau	Per	Str	V	A-L	A-L	B-L	B-L 60	A	7	Blo	Wis 7500	W	F	8.25	78.38	G*	Tim 16302	Ros	Opt	Opt	10025
Oneida SFF-15	....	Opt	.....	P 38x9	P 38x9	Wau 6AB	6-4½x4¾	48.8	L	PC	Wau	Per	Str	V	A-L	A-L	B-L	B-L 60	A	7	Blo	Wis 8000	W	F	10.25	96.35	G*	Tim 16302	Ros	Opt	Opt	10550
Pierce Arrow RD	5400	133	133	S 36x6	S 36x6	Own RD	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RD	A	4	Spi	Own RD	W	F	7.8	41.5	B*	Own	Own	92¼	63¾	8650
Pierce-Arrow RF	5600	132	132	S 36x6	S 36x7	Own RF	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RF	A	4	Spi	Own RF	W	F	10.0	51.9	B*	Own	Own	92¼	63¾	9340
Saurer	6000	Opt	142	S 40x6	DS40x7	Own	4-4¼x3½	29.3	L	PS	Own	Own	Own	G	Sci	Opt	K. Own	Own	U	4	Own	Own	E	F	7.87	50.	B	Own	Own	104	68	7500
Schacht 5 Ton	....	130	.....	S 34x5	S 34x10	Wau XK	6-3¾x4½	33.7	L	PC	.....	Own	Zen	G	L-N	L-N	D. Ful	Ful	U	4	Spi	Own	R	F	9.42	45.22	G	Own	Ros	.....	.....	6200
Schacht 7 Ton	....	130	.....	S 36x5	S 36x12	Wau KU	6-4¼x4¾	45.9	L	PC	.....	Own	Zen	G	Bos-A	Non	D. B-L	Ful	U	4	Spi	Own	R	F	10.3	65.0	B	Own	Own	.....	.....	7500
Schacht 13 Ton	....	130	.....	S 36x6	DS40x7	Wau SRL	6-4⅝x5½	45.9	L	PC	.....	Own	Zen	G	Bos-A	Non	D. B-L	B-L	U	7	Spi	Own	W	F	14.0	88.2	B	Own	Ros	.....	.....	10000
Schacht 15 Ton	....	130	.....	S 36x7	DS40x8	Wau SRL	6-4⅝x5⅛	45.9	L	PC	.....	Own	Zen	G	Bos-A	Non	D. B-L	B-L	U	7	Spi	Own	W	F	14.0	88.2	B	Own	Ros	.....	.....	10600
Walter FK	6100	Opt	118	P 40x8	P 40x8	Own 6	6-4¼x4¾	48.4	L	PC	Own	Own	Zen	V	Eis	D-R	. Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	108	78	7503
Walter FH	7600	Opt	136	P 40x8	DP40x8	Own 6	6-4½x5¾	48.6	L	PC	Own	Own	Zen	V	Eis	D-R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	9000
Walter FHR	7600	Opt	172	S 40x8	DS40x8	Own 6	6-4½x5¾	48.6	L	PC	Own	Own	Zen	V	Eis	D.R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	10000
*White 52T	4700	129½	129½	S 36x5‡	DS40x5	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	.....	L-N‡	P. Own	Own 2B	U	4	Spi	Own	R	F	11.7	76.5	B*	Own	Own	94⅝	62⅝	8236
*White 51A	3875	134	134	S 36x5‡	S 36x8‡	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	.....	L-N‡	P. Own	Own 2B	U	4	Spi	Own	S	½	7.14	46.7	B*	Own	Own	80	48½	6045

Motor Bus Chassis Specifications

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MAKE AND MODEL	GENERAL					ENGINE				ELECTRICAL SYSTEM				Normal Speed		TRANSMISSION				REAR AXLE			FRONT AXLE		TIRES AND WHEELS			Turning Radius (Ft.)	DIMENSIONS (In.)		
		WEIGHT										BATTERY				CLUTCH	GEARSET								TIRES (In.)				OVERALL		
	Seating Capacity	Chassis Only	Chassis with Body	Recommended Body Allowance	Wheelbase	Make and Model	Number of Cylinders, Bore and Stroke	Radiator Make	Carburetor Make	Ignition System Make	Generator and Starter Make	Make	Voltage and Amp. Hr. Cap.	High M. P. H.	Low M. P. H.	Type and Make	Make and Model	Number of Forward Speeds	Universal Make	Make and Model	Final Drive	Brake Location	Make and Model	Steering Gear Make	Front	Rear	Wheels—Make		Floor Height	Length	Width
A.C.F. 508	30	....	.....	....	230	Ha S	6-4¼x5½	.....	Zen	D-R	D-R	Opt	12-180	.....	.....	P. B-L	B-L 55	4	Spi	Tim 65252	W	G	Tim 1660	Ros	P 38x7	DP38x7	Bud	37	22	338¾	96
A. C. F. 511	40	....	.....	....	230	Ha S	6-4½x5½	.....	Zen	D-R	D-R	Opt	12-180	.....	.....	P. B-L	B-L 60	3	M.M.	Tim 6536	W	G	Tim 1660	Han	P 38x9	P 38x9	Bud	39	26	359	94
A.C.F. 601	23	....	.....	....	198	Ha S	6-3¾x5	.....	Zen	D-R	D-R	Opt	12-115	.....	.....	D. B-L	B-L 55	4	Spi	Tim 65011	W	E*	Tim 15705	Ros	P 34x7½	DP34x7½	Bud	33	24	301	91½
†A.C.F. 602	21	....	.....	....	198	Ha S	6-4¼x5½	.....	Zen	D-R	D-R	Opt	12-115	.....	.....	D. B-L	B-L 55	4	Spi	Tim 65195	W	E	Tim 15705	Ros	B 36x8.2	5B36x8.25	Bud	33	24	301	91½
Acme 116	18	4910	8460	....	180	Con 6B	6-3¾x5	Per	Zen	Eis	Bos-A	Wil	6-153	40	.....	D. B-L	B-L 51	4	Blo	Wis 67410	R	A*	Shu	Ros	P 32x6	DP32x6	Mot	.....	21¾	259	83¾

Acme 112	22	5110	9280	....	205	Con 7T	6-4½x5¼	Per	Str	Eis	Bos-A	Wil	6-153	45	.....	D. B-L	B-L 55	4	Blo	Wis	B	A*	Shu	Ros	P 36x6	DP32x6	Mot	.....	21¾	276	93¾
Brockway JB	16	3200	4700	1500	142	Wis C	4-3½x5	G&O	Zen	A-L	A-L	Exi	6-153	38	5.0	P. B&B	B-L 20	3	Spi	Col 55001	S	G*	Col 3204	Ros	P 32x6	P 32x6	Mel	25	31½	203	67¾
Brockway EB	20	3975	6350	2500	153°	Wis SU	4-4x5	G&O	Zen	L-N	L-N	Exi	12-220	40	7.0	D. B-L	B-L 30	3	Spi	Col 55001	S	G*	Col 5503	Ros	P 32x6	P 34x7	Mel	28	28½	243	64
Brockway EB4	20	4150	6400	2500	154°	Wis Y	6-3⅝x5	G&O	Zen	L-N	L-N	Exi	12-220	38	7.0	D. B-L	B-L 30	3	Spi	Col 55001	S	G*	Col 5503	Ros	P 32x6	P 34x7	Mel	28	28½	243	64
Brockway H	26	6450	7975	3000	182°	Wis H	6-4x5	G&O	Zen	L-N	L-N	Exi	12-220	30	8.5	D. B-L	B-L 55	4	Spi	Wis 68310	R	G*	Shu 5550B	Ros	P 32x6	DP32x6	Bud	30	26½	256	74
Brockway JBF	16	3450	4700	1500	149	Wis F	6-3¼x4¼	G&O	Zen	A-L	A-L	Exi	6-153	38	5.0	P. B&B	B-L 20	3	Spi	Col 55001	S	G*	Col 3205	Ros	P 32x6	P 32x6	Mel	25	31½	213	67¼
Brockway SW	24	4820	6450	2500	173°	Wis Y	6-3⅝x5	G&O	Zen	L-N	L-N	Exi	12-220	38	.....	D. B-L	B-L 35	4	Spi	Wis 4610	R	G*	Col 5503	Ros	P 32x6	DP32x6	Bud	32	28½	263	68
Brockway JI	32	7680	11000	5000	221°	Wis H	6-4x5	G&O	Zen	L-N	L-N	Exi	12-220	30	6.0	D. B-L	B-L 55	4	Spl	Tim 65220	I	B‡	Shu 610B	Ros	P 34x7	DP34x7	Bud	32	26	344¾	90
Corbitt SB-620	15	3350	5100	1750	138	Con 18E	6-3⅝x4	Per	Str	D-R	D-R	Pol	6-150	50	5.0	D. B-L	B-L 20	4	Spl	Tim 52000H	S	G	Tim 11703H	Ros	B32x6.75	B32x6.75	.....	26	27	240	72
Corbitt SB630	18	3850	.....	.....	150	Con 16C	6-3⅝x4⅝	Per	Zen	D-R	D-R	Pol	6-150	50	7.0	D. B-L	B-L 20	4	Spi	Tim 54000H	S	G	Tim 12703H	Ros	B34x7.50	B34x7.50	.....	30	28	258½	74⅝
*Corbitt SB-646	21	.....	.....	.....	Opt	Con 16R	6-4x4½	Per	Zen	D-R	D-R	Pol	6-150	40	7.0	D. B-L	B-L 35	4	Spi	Tim 63103H	W	G	Tim 14703H	Ros	P 32x6	DP32x6	.....	30	28	.....	....
*Day-Elder 30	30	7300	11300	4000	220	Con 21R	6-4¾x4¾	Bus	Zen	L-N	L-N	USL	12-148	35	7.0	D. B-L	B-L 55	4	Spl	Tim 65711D	W	A	Shu 610B	Ros	P 36x6	DP36x6	Bud	27	29	317	80
Denby 36	30	7000	10500	3500	216	Con 6B	6-3¾x5	Lon	Zen	Bos-R	Bos-R	Wil	12-153	30	.....	D. Ful	Ful GU14	4	Blo	Cla 3D	I	A	Shu 610B	Ros	P 36x6	DP36x6	Bud	34	21	294	91
Dodge Brothers	21	4045	7175	3200	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	P 34x7	Cla	30	28½	256	77
Dodge Brothers	21	4075	7205	3200	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	28	27	256	77
Dodge Brothers	21	4075	7205	3200	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	B32x6.75	DB32x6.75	Bud	28	27	256	77
Dodge Brothers	21	4075	7205	3200	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	29	27½	256	77
Dodge Brothers	21	4255	7415	3200	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	P 34x7	Cla	30	28½	261	86
Dodge Brothers	21	4205	7530	3300	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	35	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	29	27½	261	86
Dodge Brothers	21	4415	7740	3300	165	Own	6-3⅜x4½	Fed	Zen	N-E	N-E	Wil	6-215	35	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	29	27½	261	86
Douglas	21	5700	9150	3450	182	Bud DW6	6-3¾x5	Chi	Zen	L-N	L-N	Exi	12-117	...	.....	D. Ful	Ful	4	Blo	Wis 67500	R	A	Shu	Ros	P 32x6	DP32x6	Van	.....	24	288	90
Fageol 503 (Kent)	29	.....	.....	.....	230	Ha S	6-4¼x5½	.....	Zen	D-R	D-R	Opt	12-180	...	.....	D. B-L	B-L	4	Spl	Tim 65190	W	G	Tim 1660	Ros	P 38x7	P 38x7	Bud	.....	.....	.....	.....
†Fageol Parlor Car	26	.....	.....	.....	233	Wau RB	6-5x5¾	Per	Zen	Bos-R	D-R	USL	12-118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	B°	Tim 1560	Ros	P 36x6	DP36x6	Bud	38½	20¼	342	89
Fageol Street Car	29	.....	.....	.....	233	Wau RB	6-5x5¾	Per	Zen	Bos-R	D-R	USL	12-118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	B°	Tim 1560	Ros	P 36x6	DP36x6	Bud	38	22½	339	89
Fageol Dbl. Deck	58	.....	.....	.....	233	Wau RB	6-5x5¾	Per	Zen	Bos-R	D-R	USL	12-118	35	8.0	D. B-L	B-L 55	4	Spl	Tim 6521	W	B°	Tim 1660	Ros	P 36x8	DP36x8	Bud	45½	21	360††	93½
Federal A6B	21	4450	.....	3000	176	Con 16C	6-3⅜x4⅝	Lon	Zen	D-R	D-R	Exi	6-215	45	.....	P. B&B	Own	4	Pet	Cla B510	B	G†	Cla F304	Ros	P 32x6	DP32x6	Mot	28½	28½	.....	.....
Fifth Ave. J	25	5850	8530	2780	172	Yell EZ	4-4x6	Own	Zen	Eis	N-E	Exi	12-120	30	7.5	P. Own	Own J	4	She	Tim 6412	W	A	Tim 1523	Ros	P 32x6	DP32x6	Bud	30½	27⅞	277	87½
Fifth Ave. L	55	6850	12040	5190	174¼	Yell EZ	4-4x6	Own	Zen	Eis	N-E	Exi	12-150	27	5.0	Yell	Own L	4	Spl	Own L	I	B	Own L	Ros	S 36x5	DS36x6	Own	26½	25	296	90
Garford KB	21	4400	11500	3000	180	Wis Y	6-3⅜x5	Lon	Zen	A-L	A-L	Wil	6-135	35	7.3	D. B-L	B-L 31	3	B.G.	Tim 5620H	B	E	Tim 1473H	Han	P 36x6	P 34x7	Day	29	25	276½	71
Garford CB	29	6900	11300	4400	220	Wis Z	6-4½x5	Lon	Zen	Spl	L-N	Wil	12-153	57	11.9	D. B-L	B-L 60S	4	Spl	Tim 6522W	W	E	Tim 1660W	Ros	P 32x6	DP32x6	Bud	35	23	.....	....
Gramm 363N	15	3100	5100	2000	164°°	Lyc S	6-3¼x4½	Own	Zen	A-L	A-L	USL	6-135	40	.....	D. Ful	Ful GU	4	Blo	Wis 4650	B	E	Col 5409	Ros	P 32x6	DP32x6	Bud	30	21	255	82
Gramm RA	17	5500	8500	3000	184	Lyc TS	6-3⅞x5	Own	Zen	DJ	DJ	Wil	6-215	40	.....	D. Ful	Ful RU	4	Blo	Wis 6647B	R	E	Shu 5550	Ros	P 34x7	DP34x7	Bud	32	21	299	82
Gramm 30	21	6200	9200	3000	210	Bud BA-6	6-4½x5½	Own	Zen	L-N	L-N	USL	12-100	40	.....	D. Ful	Ful RU	4	Blo	Wis 6647B	R	E	Shu 5550	Ros	P 34x7	DP34x7	Bud	35	21	325	82
Gramm 31	25	6500	9500	3000	236	Bud BA-6	6-4½x5½	Own	Zen	L-N	L-N	USL	12-100	40	.....	D. Ful	Ful RU	4	Blo	Wis 6647B	R	E	Shu 5550	Ros	P 32x6	DP32x6	Bud	.....	25	.....	....
Guilder 20	17	3650	.....	....	152	Bud HS6	6-3⅝x4½	G&O	Zen	D-R	D-R	Wil	6-	...	.....	D. B-L	B-L 31	3	Spi	Cla 504	B	A*	Shu 5410	Ros	P 32x6	DP32x6	Bud	.....	26	.....	....
Guilder 26	21	.....	.....	....	180	Bud DW6	6-3¾x5	G&O	Zen	D-R	D-R	Wil	6-	...	.....	D. B-L	B-L 31	3	Spi	Wis 4700	R	A*	Shu 5410	Ros	P 32x6	DP32x6	Bud	.....	26	.....	....
Guilder 35	25	.....	.....	....	204	Bud DW6	6-3¾x5	G&O	Zen	D-R	D-R	Wil	6-	...	.....	D. B-L	B-L 51	4	Spi	Wis 67500	R	A‡	Shu 5550B	Ros	P 32x6	DP32x6	Bud	.....	26	.....	....
Guilder 36	25	6000	.....	....	204	Bud BA6	6-4½x5½	G&O	Zen	N-E	N-E	Wil	12-	45	5.0	D. B-L	B-L 51	4	Spi	Wis 1261K	R	A‡	Shu 610B	Ros	P 32x6	DP36x6	Bud	36	26	312	92
Hahn KB	27	4900	8400	....	198	Con 6B	6-3¾x5	Chi	Sch	Bos-R	L-N	Wil	12-220	...	5.0	D. B-L	B-L	4	Spi	Wis 6730	R	A	Shu 5550B	Ros	S 32x6	DP32x6	Bud	.....	27	Opt	Opt
Hahn LB	35	6800	10300	....	245	Con 14H	6-4¼x5¾	Chi	Sch	Bos-R	L-N	Wil	12-220	...	5.0	D. B-L	B-L 60	4	Spi	Tim 6530	R	A	Shu 5550B	Ros	S 34x7	DP34x7	Bud	.....	28	Opt	Opt
Hahn OB	20	4700	7500	....	144	Her OX	4-4x5	Chi	Str	Bos-R	L-N	Wil	6-110	...	7.0	D. B-L	B-L	3	Spi	Wis 6736	R	A	Wis 11A	Ros	S 32x6	S 32x6	Bud	.....	25	Opt	Opt
Int. Harvester 15	16	4125	.....	2500	160	Lyc 4SL	6-3¼x4½	Lon	Zen	Dyn	Dyn	Pol	12-100	40	7.0	P. Lon	Own	3	M.M.	Eat	B	A*	Eat	CAS	B32x6.75	B32x6.75	Bud	29	24	259	77
Kenworth BU21	21	6100	.....	3500	203	Bud BA6	6-4½x5½	Bus	Zen	Bos-R	L-N	Gor	6-150	45	.....	D. B-L	B-L 51	4	Spi	Cla 720	B	B*	Shu 610B	Ros	P 32x6	DP32x6	Bud	36	25	293	60
Kenworth BU29	21	7000	.....	4500	244	Bud GL6	6-4½x6	Bus	Zen	Bos-R	L-N	Gor	6-150	45	.....	D. B-L	B-L 51	4	Spi	Tim 65220S	W	B*	Tim 1660	Ros	P 34x7	DP34x7	Bud	40	25	364	72
Kissel	21	.....	7725	2400	182	Own CB6	6-3⅞x5½	Fed	Sch	D-R	D-R	Wil	6-240	45	.....	P. B&B	W-G	3	Spi	Tim 5620H	B	E	Tim 2341H	Ros	P 32x6	P 34x7	Bud	.....	24	248	....
Larrabee XH31	21	5600	9000	3400	190	Con 6B	6-3¾x5	Fed	Zen	D-R	D-R	Exi	12-120	45	5.0	D. B-L	B-L 51	4	Spi	Wis 67300	R	A	Shu 5550B	Ros	P 32x6	DP32x7	Bud	37	25	220	84
Mack AB City Type	25	7200	10450	3250	196	Own AB	4-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	D. Own	Own AB	4	Spi	Own AB	R	B‡	Own AB	Own	Opt*	Opt*	Bud	27½	25⅝	311	89½
Mack AB City Type	29	7300	11250	3950	225	Own AB	4-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	D. Own	Own AB	4	Spi	Own AB	R	B‡	Own AB	Own	Opt*	Opt*	Bud	31	25⅝	340¼	89½
Mack AB Par. Car	25	7340	11065	3725	230½	Own AB	4-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	D. Own	Own AB	4	Spi	Own AB	R	B‡	Own AB	Own	Opt*	Opt*	Bud	31½	28	333⅛	91⅝
Mack AB (gas.-elec.)	25	8385	11655	3270	196	Own AB	4-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	. Non	Non	....	Spi	Own AB	R	B‡	Own AB	Own	S 34x7*	DS34x7	Bud	29	25⅝	311	89½
Mack AB (gas.-elec.)	29	8545	12425	3880	225	Own AB	4-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	. Non	Non	....	Spi	Own AB	R	B‡	Own AB	Own	S 34x7*	DS34x7*	Bud	32	25⅝	340¼	89½
Mack AL City Type	29	9000	12880	3880	233	Own AL	6-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	P. Own	Own AL	4	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	351⅞	89½
Mack AL Par. Car	29	9000	13700	4700	233	Own AL	6-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	P. Own	Own AL	4	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	354¾	91⅝
Mack AL (gas.-elec.)	29	11520	15400	3880	233	Own AL	6-4½x5	Own	Str	Spl	N-E‡	Exi	12-110	...	.....	. Non	Non	...	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	251⅞	89½
Menominee T	16	5601	8300	3200	176	Wis Y	6-3⅜x5	Per	Zen	D-R	D-R	Wil	6-170	38	10	P. B&B	Cot AU	4	Pic	Wis	R	B	Shu 5550	Ros	P 32x6	DP32x6	Bud	28	26	262	77½
Menominee T	21	6350	10350	4000	201	Wis HB	6-3⅜x5	Per	Zen	D-R	D-R	Wil	6-170	38	7	P. B&B	Cot AU	4	Pic	Wis	R	B	Shu 5550	Ros	P 34x7	DP34x7	Bud	28	26	292	87
Pierce-Arrow Z	25	6240	9100	3000	196	Own	6-4x5½	Own	Own	D-R	D-R	Wil	12-132	50	3.0	. Own	Own	4	Spi	Own	W	B‡	Own	Own	P 36x6	DP36x6	Bud	37½	28	282	89⅞
Pierce-Arrow Z	30	6350	9700	3500	220	Own	6-4x5½	Own	Own	D-R	D-R	Wil	12-132	50	3.0	. Own	Own 55	4	Spi	Own	W	B‡	Own	Own	P 36x6	DP36x6	Bud	40	28	303	89⅞
Rehberger B4	29	7000	10500	3500	224	Bud BA6	6-4½x5½	Bus	Zen	Eis	L-N	Wil	12-132	40	7.0	D. B-L	B-L 55	4	Spi	Tim 65704D	W	B	Shu 610B	Ros	P 36x6	DP36x6	Bud	33	30	326	90
*Reo FB	12	3950	.....	2500	156	Own	6-3⅜x5	Own	Sch	D-R	D-R	Wil	6-240	...	.....	D. B-L	Own	4	Pet	Own	S	E†	Own	Han	B32x6.75	B36x8.25	Cla	.....	.....	.....	.....
*Reo GB	21	4790	.....	3500	179	Own	6-3⅜x5	Own	Sch	D-R	D-R	Wil	6-240	...	.....	D. B-L	Own	4	Pet	Own	S	E†	Own	Han	B34x7.50	DB34x7.5	Cla	29½	.....	.....	.....
Schacht 60	25	7800	.....	4000	205°	Wau KU	6-4¼x4¾	Own	Zen	L-N	L-N	Exi	6-120	50	.....	D. B-L	B-L	7	Spi	Wis 1250K	R	A‡	Own	Ros	P 38x7	DP38x7	Bud	33	28	291⅝	84
Selden Pacemaker	18	4075	.....	2000	185°	Con 15C	6-3⅝x4⅝	Own	Str	N-E	N-E	Exi	12-153	50	5.0	D. B-L	B-L 31	3	Blo	Cla 501	B	.....	Shu	Ros	S 32x6	S 32x6	Van	.....	24	Opt	Opt
Selden Roadmaster	25	5650	.....	3000	210°	Con 6B	6-3¾x5	Own	Str	N-E	N-E	Exi	12-150	50	5.0	. B-L	B-L 51	4	Blo	Cla 720	.....	.....	Tim	Ros	S 32x6	DP24x7	Van	.....	24	.....	....
Studebaker 75	21	5290	8260	3150	184	Own	6-3½x5	Lon	B.B.	D-R	D-R	Wil	12-108	55	5.0	D. Lon	Ful	4	Spi	Eat	S	G*	Eat	Ros	B34x7.5	B 34x7.5	Bud	31	27½	279⅝	90
Studebaker 75 Jr	14	4600	7330	2730	158	Own	6-3½x5	Lon	B.B.	D-R	D-R	Wil	12-108	55	5.0	D. Lon	Ful	3	Spi	Eat	S	G*	Eat	Ros	B32x6.75	B 32x6.75	Van	30	26¾	250⅛	78½
Studebaker 76 Spec	22	4765	7895	3130	184	Own	6-3½x5	Lon	B.B.	D-R	D-R	Wil	12-108	55	5.0	D. Lon	Ful	3	Spi	Eat	S	G*	Eat	Ros	B32x6.75	B 32x6.75	Van	34	24	289	92
Twin Coach	40	.....	15500	....	194	Own	6-3¾x4½‡	Lon	Zen	D-R	D-R	Exi	12-150	50	5.0	D. B-L	B-L ‡	3	Pet	Tim	W	E°	Tim	Ros	P40x10½	DP38x7	Day	33	26	360	96
Ward La France 3B	25	6300	9700	3400	Opt	Wau DU	6-4½x6¾	Bus	Str	Bos-R	Bos-R	Wil	12-132	35	.....	D. B-L	B-L 55	4	Spi	Tim	W	A	She	Ros	P 36x6	DP36x6	Bud	36	28	304	75½
Ward La France 4B6	25	6600	.....	....	Opt	Wau 6QL	6-4x5¾	.....	Str	Bos-R	Bos-R	Pol	12-174	...	.....	D. B-L	B-L	4	Spi	Tim	W	....	Shu	Ros	P 34x7	DP34x7	Bud	.....	.....	.....	.....
Whitcomb	25	6000	9700	....	216	Wis Z	6-4½x5	Mod	Str	L-N	L-N	Wil	12-132	50	4.0	D. Ful	Ful RU16	4	Own	Own	W	G	Own	Ros	B38x8.25	B38x8.25	Own	32½	23	330	96
White 50B	29	6494	.....	....	198°	Own GRB-1	4-4¼x5¾	Own	Zen	.....	L-N	Opt	12-132	...	.....	P. Own	Own GRBB	4	Spi	Own 50B	S	B°	Own 50B	Own	P 34x7	DP34x7	Bud	38½	26	299	83
White 53	21	6000	.....	....	180°	Own GRB-1	4-4¼x5¾	Own	Zen	.....	L-N	Opt	12-132	...	.....	P. Own	Own GRBB	4	Spi	Own 53	S	B‡	Own 53	Own	B34x7.50	DB34x7.5	Bud	33½	26	281¼	84½
White 54	29	7915	.....	....	227°	Own 1A	6-4⅝x5¾	Own	Zen	L-N	L-N	Opt	12-112	...	.....	P. Own	Own 1B	4	Spi	Own 54	S	G°	Own 54	Ros	B 38x9.0	DB38x9.0	Bud	46¾	24⅜	327	91
Yellow Coach Y	29	6750	13590	6840	225	Yell	6-3½x5½	Lon	Zen	N-E	N-E	Ves	12-100	...	.....	D. Lon	B-L	4	Spi	Tim	S	E	Tim	Ros	B 40x9.0	DB40x9 0	Bud	31½	25⅛	344	90
Yellow Coach Z	29	7550	12500	4950	200	Yell	6-4¼x5½	Lon	Zen	N-E	N-E	Ves	12-100	...	.....	D. Own	B-L	4	Spi	Tim	W	A	Tim	Ros	P 36x6	DP36x6	Bud	35½	26⅝	291	90
Yellow Coach Z	33	7380	12210	4830	230	Yell	6-4¼x5½	Lon	Zen	N-E	N-E	Ves	12-100	...	.....	D Own	B-L	4	Spi	Tim	W	E	Tim	Ros	P 36x7	DP38x7	Bud	...	.....	.....	.....
YellowCoach Z,Gas.Elec.	33	9145	14110	4965	230	Yell	6-4¼x5½	Lon	Zen	N-E	N-E	Exi	6-285	...	.....	Non	Non	....	Spi	Tim	W	A	Tim	Ros	P 36x7	DP36x7	Bud	...	25	34.	92½
YellowCoach Z,Gas.Elec.	66	10350	17350	7000	230	Yell	6-4¼x5½	Lon	Zen	N-E	N-E	Exi	6-285	...	..	Non	Non	....	Spi	Tim	W	A	Tim	Ros	S 34x7	DS34x7	Bud	.....	23½	364	94

‡—Two

Electric Commercial Cars

Name and Model Number	Total Weight Resting on Four Tires	Chassis Weight—Exclusive of Battery	Minimum Load Capacity	Maximum Load Capacity	Chassis Price	Maximum Speed	Location of Battery	Mileage Per Charge	Motor	Controller	Speeds Forward	Drive	Rear Axle	Spring	Front Tires	Rear Tires	Steering Gear	Wheelbase	Per Cent of Weight on Rear Wheels
O. B-B	.....	.....	.....	.....	.....	13	.....	.....	G-E	Own	....	C	D	.....	S 36x4	DS36x3½	Own	107	.....
O. B-C	.....	.....	.....	.....	.....	11	.....	.....	G-E	Own	....	C	D	.....	S 36x5	DS36x4	Own	135	.....
O. B-D	.....	.....	.....	.....	.....	10	.....	.....	G-E	Own	....	C	D	.....	S 36x6	DS36x5	Own	143	.....
Walker 10	.....	2400	.....	1500	1750	14	H&S	60	G-E	Own	4	S	Cla	Mat	S 32x3½‡	S 32x4‡	Ros	108°	66
Walker 20	.....	3200	1500	2000	2450	15	A	50	Wes	Own	5	Own	Own	Mat	S 34x3½	S 36x4	Ros	94°	66
Walker 25	.....	3500	2000	3000	2550	14	A	50	Wes	Own	5	Own	Own	Mat	S 34x4	S 36x5	Ros	101°	66
Walker 45	.....	4400	4000	5000	3300	14	A	50	Wes	Own	5	Own	Own	Mat	S 36x4	S 36x6	Ros	114°	66
Walker 50	.....	4800	5000	6000	3450	13	A	50	Wes	Own	5	Own	Own	Mat	S 36x5	S 36x8	Ros	126°	66
Walker 65	.....	7000	7000	9000	4350	11	A	50	G-E	Own	5	Own	Own	Mat	S 36x5	DS40x5	Ros	131°	66
Walker 75	.....	7800	10000	14000	4500	10	A	50	G-E	Own	5	Own	Own	Mat	S 36x6	DS40x6	Ros	141°	66
Ward B	6500	2300	.....	.....	.....	14	S	.....	•	Own	4	W	Own	Eat	P 30x5	P 30x5	Ros	91	.....
Ward C	8400	2850	.....	.....	.....	13	S	.....	•	Own	4	W	Own	Eat	P 30x5	P 32x6	Ros	96	.....
Ward E	13000	4100	.....	.....	.....	12½	A	.....	•	Own	4	W	Wis	Eat	S 34x5	S 36x7	Ros	114	.....
Ward G	17000	4950	.....	.....	.....	11	A	.....	•	Own	5	W	Wis	Eat	S 36x8	S 36x8	Ros	128	.....
Ward K	25000	7750	.....	.....	.....	10	A	.....	•	Own	5	W	Wis	Eat	S 36x6	S 36x10	Ros	160	.....
Ward KS	30000	8075	.....	.....	.....	9½	A	.....	•	Own	5	W	Wis	Eat	S 36x7	DS36x7	Ros	160	.....

NOTE: Battery Equipment on all above makes is at the option of the purchaser. Battery Location Abbreviations: A-amidships; H-under hood; and S-under seat. *G-E or Wes

KEY OF ABBREVIATIONS

For addresses of manufacturers listed below see Chilton Catalog and Directory

Wheelbase

*More than one wheelbase furnished.

Tires

B—Balloon.
P—Pneumatics standard equip.
DP—Dual pneumatics standard equipment.
S—Solids.
DS—Dual solids.
*—Tires at extra cost.
‡—Pneumatics can be furnished at extra cost.

Engine

*Models also furnished with engine under seat.
Bud—Buda Co.
Con—Continental M. Corp.
D—Head and Side.
FP—Full Pressure to all bearings including wrist pins.
H—Overhead.
HaS—American Car & Fdy. Co.
Her—Hercules Motor Corp.
I—In Head.
Jackson—Master M. T. Mfg. Co.
L—L-Head.
Lyc—Lycoming M. Corp.
PC—Pressure to all crankshaft and connecting-rod bearings.
PG—Pump, Gravity & Splash.
PS—Pressure with splash.
SP—Circulating splash.
T—T-Head.
Wau—Waukesha M. Co.
Wis—Wisconsin M. Mfg. Co.
Yell—Yellow Sleeve V. E. Wks.
X—Sleeve.

Governor

Dup—Eisemann Magneto Corp.
Han—Handy Gov. Co.
K. P.—Handy Gov. Co.
McC—E. R. Klemm.
Mon—Monarch Gov. Co.
Non—Not Supplied.
Pha—Bethlehem Fabricators, Inc.
Pie—Pierce Governor Co.
Sim—Eisemann Magneto Corp.
Wau—Waukesha M. Co.

Radiator

Bow—Bowerbank, E. R. Co.
Bus—Bush Mfg. Co.
Chi—Chicago Mfg. Co.
Fed—Fedders Mfg. Co.
G&O—G. & O. Mfg. Co.
Har—Harrison Rad. Corp.
Lon—Long Mfg. Co.
McC—McCord Rad. & Mfg. Co.
McK—McKinnon Dash Co.
Mod—Modine Mfg. Co.
Per—Perfex Corp.
R-T—Rome-Turney Rad. Co.
U. S.—U. S. Cartridge Co.
You—Young Rad. Co.

Fuel System

B.B.—Penberthy Injector Co.
Car—Carter Carburetor Co.
E—Electric Pump.
G—Gravity.
Mar—Marvel Carbureter Co.
O—Mechanical Pump.
P—Pressure.
Sch—Wheeler Schebler Car. Co.
Ste—Detroit Lubricator Co.
Str—Stromberg Motor Dev. Co.
Til—Tillotson Mfg. Co.
V—Vacuum.
Zen—Zenith-Detroit Corp.

Electrical Systems

‡—Generator & Starter at Extra Cost.
†—Starter not supplied, Generator at Extra Cost.
*—Starter at Extra Cost.
A-L—Electric Auto-Lite Corp.
Apo—Apollo Magneto Corp.
Bos-A—Am. Bosch Magneto Co.
Bos-R—Rob. Bosch Magneto Co.
Con.—Conn. Tel. & Elec. Co.
DJ—DeJon Elec. Corp.
D-R—Delco-Remy Co.
Dyn—Owen Dyneto Corp.
Eis—Eisemann Magneto Corp.
Exi—Electric S. B. Co.
Gor—R. J. Gorman Co., Inc.
L-N—Leece-Neville Co.
N-E—North East Elect. Co.
Non—Not Supplied.
Pol—Prest-O-Lite Co.
Sci—Scintilla Magneto Co.
Spl—Splitdorf Electrical Co.
USL—USL Battery Corp.
Ves—Vesta Battery Corp.
Wil—Willard S. B. Co.

Clutch and Gearset

*—Other ratios optional.
†—Auxiliary two-speed transmission optional.
A—Amidships.
B & B—Borg & Beck Co.
B-L—Brown-Lipe Gear Co.
Cot—Cotta Trans. Corp.
Cov—Covert Gear Co.
Det—A. J. Detlaff Co.
D-G—Detroit Gear & Mach. Co.
D—Disk.
Ful—Fuller & Sons Mfg. Co.
H-S—Merchant & Evans Co.
J—Unit with Jackshaft.
K—Cone.
Lon—Long Mfg. Co.
M. M.—Mechanics Mach. Co.
Mun—Muncie Products Div. General Motors Corp.
O—Disk in Oil.
P—Plate.
Roc—Rockford Drill. Mach. Co.
U—Unit with Engine.
W-G—Warner Gear Co.
Yell—Yellow Sleeve V. E. Wks.

Universal

B.G.—Universal Machine Co.
Blo—Blood Bros. Mach. Co.
Cle—Cleveland St. Prod. Corp.
Har—Spicer Mfg. Co.
M-E—Merchant & Evans Co.
M. M.—Mechanics Machine Co.
Pet—Cleveland Univ. Parts Co.
Pic—Pick Mfg. Co.
Spi—Spicer Mfg. Co.
The—Thermoid Rubber Co.
U-M—Universal Machine Co.
U-P—Universal Products Co.

Front and Rear Axles

*—Two speed
½—Semi-Floating.
¾—Three-Quarter Floating.
B—Straight Bevel.
Cla—Clark Equip. Co.
Col—Columbia Axle Co.
Con—Continental Axle Co.
C—Chain.
D—Dead.
Eat—Eaton Axle Co.
F—Floating.
I—Internal Gear.
R—Double Reduction.
S—Spiral Bevel.
Sal—Salisbury Axle Co.
She—Sheldon Axle & Spring Co.
Shu—Shuler Axle Co., Inc.
Tim—Timken Det. Axle Co.
Tor—Eaton Axle & Spring Co.
W—Worm.
Wis—Wisconsin Axle Co.

Brake

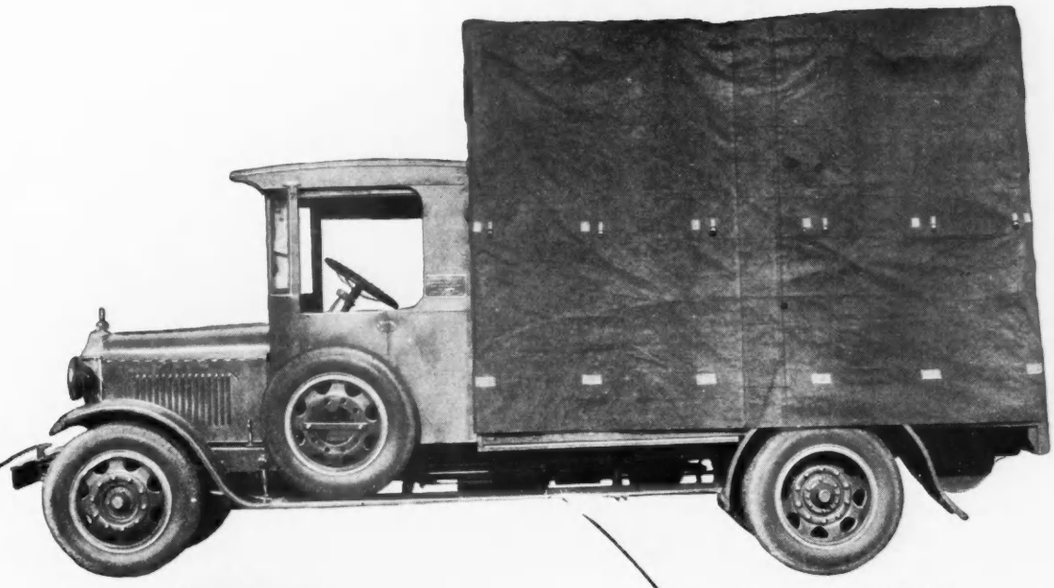
A—Rear Wheels only.
B—Driveshaft and Rear Wheels.
D—Jackshaft and Rear Wheels.
E—4-Wheel Brakes.
F—4-Wheel Brakes with emergency on jackshaft.
G—4-Wheel Brakes with emergency on driveshaft.
H—4-Wheel Brakes with emergency on rear wheels.

Service Brake Type

*—Mechanical.
†—Hydraulic.
‡—Vacuum Booster.
°Compressed Air.

Steering Gear

CAS—Columbus G. & P. Co.
D-G—Detroit Gear & Mach. Co.
Dod—Dodge Bros. Co.
Gem—Gemmer Mfg. Co.
Han—Hannum Mfg. Co.
Jac—Saginaw Steering Gear, Div. General Motors Corp.
Lav—Hannum Mfg. Co.
Ros—Ross Gear & Tool Co.



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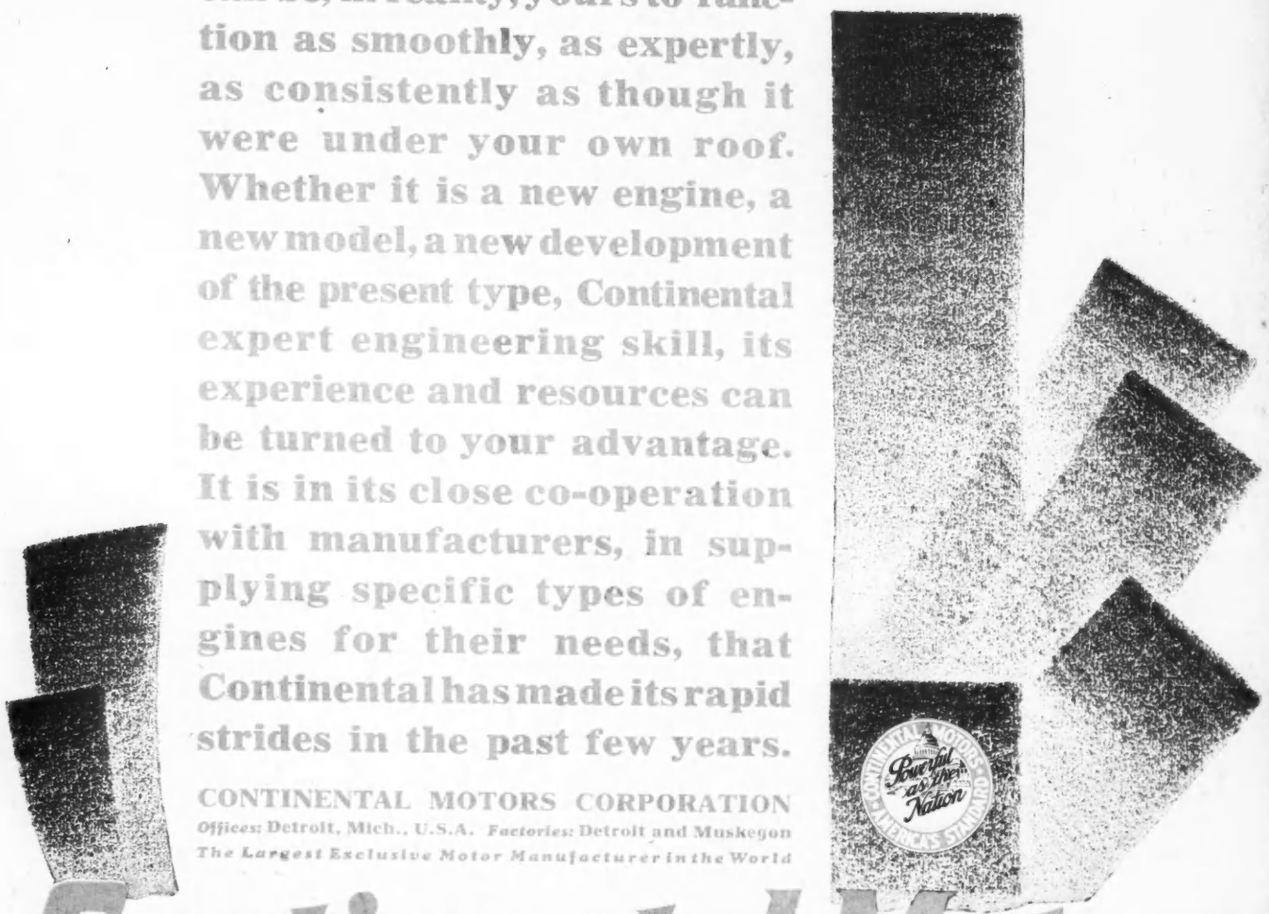

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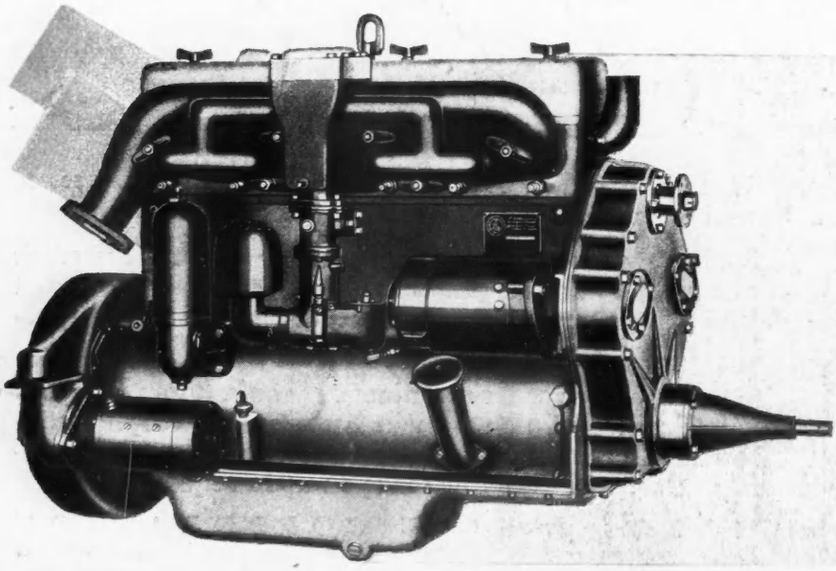
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